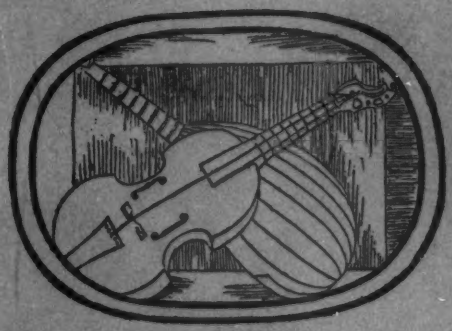
THE Galpin Society JOURNAL



JULY 1960

XIII

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THE GALPIN SOCIETY was formed in October 1946 with the object of bringing together all those interested in research into the history of European musical instruments. Its name commemorates the pioneer work of the late Canon Francis W. Galpin; its aims are to promote the study of the history, construction and functions of instruments of music and all cognate subjects, and to further this research by the publication of a JOURNAL and by all other practicable means. The Society plans to compile and publish bibliographies, catalogues and monographs on organological matters.

The Society is non-profitmaking; application for membership may be made by anyone, irrespective of nationality or country of residence. The annual subscription (one guinea) entitles the member to one free copy of the Society's JOURNAL for that year, and to a substantial reduction in the prices of the Society's other publications.

The Galpin Society
JOURNAL

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The JOURNAL will appear not less often than once a year. It is issued free to full members of the Galpin Society; the subscription price to others will be one guinea a year post paid. The responsibility for opinions expressed in contributions to the JOURNAL rests with the writers. Material appearing in the JOURNAL is copyrighted by the Society and may not be reprinted without its permission.

Editorial

One must acknowledge that interests and studies like those of this Society nowadays increasingly feel a need for lists of things, from bibliographies onwards. In this number of the JOURNAL several lists will be found. Others are and have been offered, including very large lists which would more than half fill an issue, and in order to help the JOURNAL to avoid becoming a battleground for space between articles and lists, while yet not to withhold from publication lists which many members might find useful, the Society has decided that long lists or other lengthy source material may be issued as OCCASIONAL PUBLICATIONS. Notice will be given in the BULLETINS when one of these is about to appear, and it will be obtainable in cyclostyled form at a moderate charge.

Preoccupation with the list of makers given in the present number has forced postponement of an appreciation of the work of Curt Sachs as mentioned in the last number; and perhaps, following the wide formal and personal tribute that he received in the musical press during last year, this delay, giving time for a quiet re-reading of his vast output, is not a bad thing. An editorial apology is due, however, for the delay over the matter of another list, namely of the contents of *GSJ* VI onwards, continuing the classified list for I–V which appeared in *GSJ* VI. An index to VI–X was in fact drafted two years ago though omitted from *GSJ* XI through other demands upon the amount of space which funds allowed. But lest any members are at this moment considering binding previous JOURNALS, it is announced with pleasure that Dr Dale S. Higbee, of Salisbury, North Carolina, has generously offered to draft author and subject indexes, separately for *GSJ* I–V and VI–X (to be followed in due course by one for XI–XV), to be printed in the same format as the JOURNAL; it is hoped that work on these will be begun shortly.

The BULLETIN has described the gratifying success of the Joint Music Congress at Cambridge last year. The papers read are expected to be made available in Hinrichsen's Music Book series. In retrospect, the proceedings were distinguished throughout by a geniality, virtuosity and fantasy, so appropriately crowned, from the side of our generous hosts and in characteristic spirit, by the final speech of the Vice-Provost of King's College, which we print with his kind permission.

SPEECH, MADE ON THE OCCASION OF THE FINAL DINNER OF THE JOINT MUSIC CONGRESS OF THE INTERNATIONAL ASSOCIATION OF MUSIC LIBRARIES AND THE GALPIN SOCIETY ON JULY 3, 1959, BY JOHN SALTMARSH, ESQ., VICE-PROVOST OF KING'S COLLEGE, CAMBRIDGE

Mr President, Ladies and Gentlemen, on behalf of the Provost and Fellows of my College, I would thank you most sincerely for the toast which you have just drunk in our honour.

It has indeed been a pleasure to us, and an honour too, to have a conference of such importance and such distinction as yours in our College during this past week.

I can assure you that all that any of us have been able to do for your convenience has been gladly done.

Ladies and Gentlemen, we the Provost and Fellows, would join with you in congratulating those who have organized your meeting on the results they have achieved, and we are delighted that your meeting has attained the outstanding success which it so clearly has done.

Mr President, Ladies and Gentlemen, I have not only a toast to reply to, but also a toast to give: the toast of your two societies, the International Association of Music Libraries and the Galpin Society.

It is now more than twenty-five years since I first attended a conference of musical scholars such as yours, and indeed that conference, the conference of the International Society for Musical Research in Cambridge in 1933 was not only the first but also the last conference of musical scholars which I ever attended. For scholar I may or may not be, but I am quite certainly no musician, and I can only have found my way into its meetings through some kind of accident.

Professor Edward Dent was the President of that society, and he took the chair at its meetings with all the skill, all the geniality, all the consummate tact and courtesy, of which he was a master: benignly tolerant, like the gods upon Olympus, of the mortal coil that unwound itself before him: one who, as an old friend wrote of him, rated friendship as highly as wisdom, and found in the combination of the two, a way of life which some might call Socratic, and others will think of as embodying the doctrines of Sarastro.

Others were there whom I remember still: Dr Percy Scholes, who gave us a foretaste of his great work on *The Puritans and Music*, then in preparation: Professor Jacques Handschin from Switzerland, who would surely have found himself in his element at this conference here in Cambridge in 1959. For he seemed to me to be an addict of music libraries; and in that year 1933, he forewent his meals, his food and his drink, so that he might savour, in the intervals of the conference, the more poignant delights of the libraries of Cambridge.

Those whom I have named are gone from us now: gone to join that antique past of music which in their lives they cherished and renewed. For Time which antiquitates antiquities, and hath an art to make dust of all things, antiquitates the scholar with his study.

And against that Opium of Time, said the Sage of Norwich, there is no antidote. Our Fathers find their graves in our short memories, and sadly tell us how we may be buried in our Survivors.

As with the scholar, so with the musician: so with the music too.

Where now are the musicians of the years that are gone, the airs and the songs, the chords and the falling notes?

> Where now the music of courtly Venice, where the merchants were the kings,
> Where St Mark's is, where the Doges used to wed the sea with rings . . .
> And you sat and played toccatas, stately at the clavichord?

Where now the gallery-scene in Mellstock church, in Thomas Hardy's youth, more than a century past: the village band, the hymns, the tunes they played?

> She turned in the high pew, until her sight
> Swept the west gallery, and caught its row
> Of music-men with viol, book, and bow
> Against the sinking sad tower-window light.
> She turned again, and in her pride's despite
> One strenuous viol's inspirer seemed to throw
> A message from his string to her below,
> Which said, I claim thee as my own forthright!

These things live for us now in memory: in memory, and only there.

> And long years thence, when Age has scared Romance,
> At some old attitude of his or glance
> That gallery-scene would break upon her mind,
> With him as minstrel, ardent, young, and trim,
> Bowing 'New Sabbath' or 'Mount Ephraim'.

Music is an ephemeral art: an ephemeron indeed, the glittering mayfly of an hour.

The notes they played vibrate and die.
And only memory can bring them back.

And in your two societies memory dwells: that which alone can prove endurance against prevailing time, the powers of silence, the iniquity of oblivion that blindly scattereth her poppy.

For you are the memory of music. In you the memory lives, outlasting time's decay:

When wasteful war shall statues overturn,
And broils root out the work of masonry,
Nor Mars his sword, nor war's quick fire shall burn
The living record of your memory.

We think tonight of the record of memory, and those who keep it: the score, the manuscript, the printed leaf: the viols, the clavichords, the flutes, which sounded once, and bodied forth the score: the scholars here, gathered from many lands, who keep the past of music, and make it live again.

Those are they who can say of our fathers' music:

Esto perpetua! Let not its beauty perish, but endure, than bronze itself more lasting.

Those are the remembrancers of music, by whom it lives for ever, ringing down the centuries in triumph, never to be quenched by oblivion's poppy, never to be silenced, and never to be stilled.

Ladies and Gentlemen, I give you the health of music's remembrancers, and the health of your two societies.

ERIC HALFPENNY

William Shaw's 'Harmonic Trumpet'

EARLY in 1959 there was discovered in the vaults of St James's Palace a very fine silver trumpet, preserved in original condition with its crooks and tuning bits in a locked mahogany case. The matter was kindly brought to my notice by Sir James Mann, K.C.V.O., Surveyor of the Queen's Works of Art, and by the courtesy of the Lord Chamberlain I was granted facilities for making a full examination of the instrument and for publishing this description. The illustration accompanying this article (Plate I) is reproduced by gracious permission of Her Majesty The Queen.

The trumpet bears the inscription *William Shaw, London, 1787* and the Arms of George III. As will presently emerge, everything points to its having been specially supplied to order for the King's private band, and it is therefore specifically an orchestral, as opposed to a State or fanfare trumpet, some ten examples of which, by the same maker or his successors, are preserved among the Regalia in the Jewel House, Tower of London. The circumstance of its having been left undisturbed for perhaps 170 years—for it certainly has come to light at no intermediate period—practically ensures that it has suffered none of the modifications or bedevilments to which old brass instruments are so peculiarly prone, and remains exactly as its maker left it.

As may be seen from the illustration, it carries the full traditional ornaments of the trumpet; the five 'garnishes', with their characteristic, spiral fluting, at the ends of each long member, or 'yard'; the triple boss or 'ball', finely engraved; and the deep and heavily embossed 'garland' surrounding the bell rim. It is noteworthy that neither the ball nor the two front garnishes are soldered in position, but are a perfect sliding fit on their tubes: a feature of early silver trumpets first noticed by the late W. F. H. Blandford, although in the present instance these ornaments appear to have been slipped over the completed tube before bending it to shape and do not conceal unconnected junctions between the yards and end-bows as he reported.

More remarkable still is the 'floating' mouthpipe or first yard, which I believe to be unique on an English specimen. The bell yard and mouthpipe are not soldered together. Instead, the mouthpiece garnish is lashed

to the bell section with silvered cordage—not wire—and its lower curve is tagged through holes in the bell rim by similar means. The mouthpipe is countersunk in a semicircular groove in the central ball, but is not attached there in any way. The only other instances known to me of this free or floating construction of trumpet tubes are those noted by Carse,[1] where the two yards are held apart by a long wooden spacer lapped with cordage. The present example suggests that the practice may have been more common than has hitherto been supposed even among old instruments which are now soldered up rigid.[2]

Finally this instrument embodies a pitch-change device which is not only unique and hitherto unknown, but can well claim to be the earliest dated application of the side-hole principle to the trumpet.

Ranged along the lower yard are four small vents, three of them covered by rotating sleeves and the other by a conventional spring key (Plate I). The sleeves are turned by small thumbpieces or lugs until the hole in the sleeve uncovers the vent, when a stop keeps the two aligned. The key uncovers its hole in the normal way when its lever is depressed. The vents are of uniform diameter, 4 mm., on a tube of 10 mm. bore. Their positions on the tube far from the bell, their small size, and their relative spacing, rule out any immediate affinity with the orthodox key trumpet with large holes ranged by semitones from the bell upwards. Practical experiment has shown that they function in a quite different way, namely as nodal vents, raising the harmonic series by a fifth when the appropriate hole is uncovered for a given length of crook. Thus, in E♭ (without crooks), vent I, nearest the player, when opened will enable the B♭ *alto* series to be played. With the D crook, vent II gives A; with C, vent III gives G; and with B♭ (*basso*) the keyed vent IV gives F.

Since this conclusion may be questioned, the following evidence is advanced.

1. Use of the 'incorrect' vent with a given crook produces a dull sound which has no determinate pitch-relationship with the crook tonality and becomes increasingly woolly the further it is from the correct nodal point. Notes obtained from the correct vent are not easy to produce, but they do possess a trumpet quality, though less sonorous than the natural sounds, at least on my quick trials of the instrument. There is no diatonic or chromatic implication in the placing of these vents. They are too small and too high up the tube to function as open note-holes in woodwind-fashion. The sleeves are too clumsy to admit of any varied manipulation as 'keys' and must obviously be set either open or shut before playing.

2. The hole most widely spaced from the others, IV, is nearest the

mouthpiece, not nearest the bell as on the key trumpet or any other instrument with side holes, obviously to compensate for the very large increment of tubing in the B♭ *basso* crook.

3. Vents I–III are meant to remain open while in use and to be covered with the tip of the left forefinger. This is proved by the cranked clearance of the key-touch round vent III which would otherwise be unnecessary. The key for vent IV is there only because this vent is practically out of reach with the B♭ crook mounted. It is not possible to cover more than one hole at a time with the fingertips owing to their wide spacing.

4. Sleeves I and II cannot be rotated with the B♭ crook in position since it fouls the lugs; *ergo* they are not intended for use with this crook.

5. Measurement of the total tube-length for the instrument plus each crook shows that the appropriate vent is in each case spaced at approximately two-thirds of this length from the mouthpiece *less* 10% 'end correction' for the bell expansion. The positions of the holes are obviously to some extent empirical; that for D (II) is too high on the tube and works better with the longer crook for this tonality (see below). The garnish on the lower yard at the mouthpiece end has been specially made in a shortened form in order to leave room for sleeve I on the tube. This confirms that the vent system is part of the original instrument and not a later addition.

As already mentioned, the instrument stands in E♭ at almost exactly $a'=440$, and is provided with four crooks and also four tuning bits, which from their graduated size (Plate I) seem more likely to have been associated with particular crooks (flattening the pitch by the same amount whichever crook is used) than an *ad hoc* assortment. This approximation to modern pitch with a bias downwards is exactly what one would expect for the period on the evidence of contemporary English woodwind instruments, and confirms the basic pitch of this trumpet as E♭ concert and not a hypothetical low-pitch F. The four crooks represent the full complement of the present instrument since the fitted case exactly takes them. They are for D, C and B♭, the first being duplicated at two different pitches. The discrepancy in length between these two D crooks, 4 cm., is far too small to provide a change of tonality and is probably to be explained by some special and immediate requirement of the player—perhaps, for example, the Handel Commemoration of 1787, the date of the instrument. A late eighteenth-century player faced with the then unfamiliar *clarino* obbligati might not care to adjust his pitch with rather insecure tuning bits. The duplication of the D crook in any case seems to focus attention on the importance of this tonality in the use of the instrument.

What are the musical implications of Shaw's harmonic device? A fifth-transposition of the harmonic series adds very little to the diatonic possibilities of the third (i.e. 'arpeggio') octave except the supertonic and the leading note of the crook tonality; yet it is to the completion of this octave that all other systems have been directed. Nor does it provide the true (written) high F♯ wanted for dominant modulation by so many late-baroque clarino parts. It does, however, provide a quick change to the dominant tonality without changing crooks, and at a time when conventional harmony was firmly rooted on this key-relationship it may have appeared the first logical step in the emancipation of the natural trumpet—always keeping in mind that the Classical use of the instrument very largely ignored the clarino fourth octave and confined it to the more characteristic fanfare patterns in the second and third.

There are two other possibilities: (1) that it may simply have been an attempt to widen the crook range of the instrument without carrying additional crooks, thus: E♭–B♭ *alto*, D–A, C–G, B♭ *basso*–F, in which case the highest natural tonality of E♭ may perhaps be significant; or (2) that the device was used for easier top notes rather in the manner of the modern B♭–F double horn.

Whatever the intention, Shaw's invention is clearly an independent and pioneer essay in enlarging the scope of the Classical trumpet. The invention may even have been prompted by the King himself. It cannot be without significance that in the same year, 1787, George III commissioned from William Forster senior—the most celebrated English luthier of the period—a double bass of larger proportions than normal.[3] This instrument, which is still extant, also bears the Royal Arms on the back of the head.[4] The instruction communicated to Forster states that as 'Garriboldie has sent to Italy for an uncommon large one' he is to exert his 'utmost skill, and exceed both in goodness and size by the performance at the Abbey next year. . . .'[5]

APPENDIX I: THE SHAW FAMILY

During the above investigation I was privileged to examine the silver State trumpets at the Tower of London through the kindness of Major General Sir H. D. W. Sitwell, C.B., M.C., Keeper of the Jewel House. Of the sixteen trumpets preserved with the Regalia, no less than ten, covering a period of forty-four years, are signed by the Shaw family of makers. The earliest, dated by its hallmark 1780, produced a surprise in the shape of an unknown early working

address for William Shaw, in Wardour Street. The Rate Books of the King Square division of the Parish of St Anne, Soho,[6] confirmed that from 1775 to 1783 Shaw was occupying 18 Wardour Street, on the north corner of Chapel Street: newly rebuilt premises of which he was the first tenant. Very probably the year 1775 marks the beginning of his career as an independent craftsman and also his marriage to his wife, Amy, who gave birth to their first son, Thomas, on September 15 of that year.[7]

Nothing has yet been discovered of William Shaw's birth or apprenticeship,[8] though there appears to have been some slight connection with Nicholas Winkings, the Royal trumpet and horn maker, whose one-time workshop he subsequently occupied (see below). It would be tempting to suggest that he may have descended from the celebrated line of seventeenth-century court trumpeters, but as Shaws abound in every London parish at this period, the lineage might prove difficult to establish.

Shaw moved to his known address at 21 Red Lion Street, Holborn, in 1784.[9] These premises, on the east side between Princes Street and Grays Inn Passage, were evidently an old-established brass foundry, for Nicholas Winkings lived there before the mid-century and until his son Samuel took over for the short period 1767–1769. From 1769 to 1783 the tenant was one John Swinbell who, although his name is unknown at the present time, was very probably another brass wind maker. It was at this address that Shaw's second son, William II, was born. He was baptised at St Andrew, Holborn, May 23, 1785.[10]

A State trumpet hallmarked 1804 was still signed by William Shaw I although by then—and indeed since 1802—London directories were showing the establishment as 'W. Shaw & Son', indicating that Thomas was now working with his father. In 1806, directory entries change to 'W. Shaw & *Sons*', presumably because the second son William II, now twenty-one years of age, had been taken into the business. Ratebook entries however remained in the name of William Shaw only, until 1823, when presumably he either retired from business or died, though the burial cannot be traced in neighbouring parishes at that time.

The last of the Shaw State trumpets and the last known instrument by the family is hallmarked 1824 and is signed *T. Shaw & Co.* The Ratebook entry changes to Thomas, the elder son, in the same year, although directories show 'Shaw & Sons' until 1825. In 1824, it will be remembered, John Shaw, 'farmer of Salop', patented his 'Transverse Spring Slides' for brass instruments.[11] Was he perhaps part of the '& Co.'? From 1826 onwards directories give only Thomas Shaw (no longer '& Co.') as a 'furnishing ironmonger', which may imply that the partnership making brass instruments had broken up. Possibly the younger brother continued elsewhere, for it is known that 'Shaw's disc valves'—the rather fragile English version of the rotary valve for brass instruments—date from about 1838. I have not attempted to trace the history of the firm beyond this point, except to note that Thomas Shaw pursued the trade of a furnishing ironmonger at the old address until 1839.

APPENDIX II:

INSTRUMENTS BY THE SHAW FAMILY

The following list, compiled with the Hon. Editor's assistance, notes all the instruments known to us at the time of writing. Additions to it would be welcomed.

1. 1780 (hallmark). Silver fanfare trumpet in F (uniquely; see below Nos. 10–15), engraved with a ducal crest on bell section, signed *W. Shaw, Wardour St., Soho, London*; also, in the frontal cartouche of the bell garland, *1st L Gds* [1st Life Guards] *B* ✱ 2. With fluted and embossed garnishes, embossed garland and engraved boss. Crown Property: Jewel House, H.M. Tower of London.

2. 1787. Silver orchestral trumpet in E♭, D, C and B♭, in case with tuning bits. Signed *William Shaw, London*, 1787. The subject of this paper. Decorations as No. 1. Crown Property: Lord Chamberlain's Office.

3. Late 18th-century. Semicircular bugle-horn, copper with plain brass garland and loops for a shoulder strap, signed, in a small stamped oblong with leaf decoration, *W. Shaw, London*. York Castle Museum. (Illus: G. Bernard Wood: *Musical Instruments in York Castle Museum*, York, n.d., p. 9.)

4. Late 18th-century. Bugle, single fold, copper with brass garland, in C and B♭. Bears a stamp identical in shape and size to No. 3, though now almost illegible. Anthony Baines.

5, 6, 7. *c.* 1800. Three fanfare trumpets in brass, with decorated garnishes, garlands and ball, signed *Wm. Shaw, 21 Red Lion Street, Holborn, London*. Warwick Castle.

8. 1804 (hallmark). Silver fanfare trumpet in E♭, signed *William Shaw, 21 Red Lion Street, Holborn, London*. Decoration as No. 1. Shown at South Kensington Exhibition, 1870, and Royal Military Exhibition, 1888. Crown Property: Jewel House.

9. *c.* 1810 (hallmark). Silver fanfare trumpet in E♭, signed *Shaw & Sons, 21 Red Lion St.* Decoration as No. 1 but with plain boss. Crown Property: Jewel House.

10, 11, 12, 13, 14, 15. 1813–15 (hallmarks). Six identical silver fanfare trumpets in E♭, signed *Shaw & Sons, 21 Red Lion St.* Decoration as No. 9. All marked *1st L Gds* (see No. 1) with the following serial marks: *A* ✱ 1, *D* ✱ 4, *E* ✱ 5, *F* ✱ 6, *G* ✱ 7, *H* ✱ 8. These instruments, which, it has been suggested, may have been completed for ceremonial use during the Peace of 1815, are apparently members of a set of at least eight. B2 and C3 are missing, but the former seems to have been replaced by bringing 'on the strength' No. 1 of this list, although it can never have been used with the others owing to its different pitch. It is safe to say that if No. 1 ever appeared on a State occasion, the player merely held it to his lips for the look of the thing, but made no sound. Three, D4, E5 and H8, were shown at the Royal Military Exhibition, 1890. It seems that about ten years later, E5 was withdrawn from service and disappeared from sight and was kept stored with No. 2, the subject of this paper. It has now been identified by its serial mark and restored to the company of its fellows in the Jewel House. Crown Property.

16. *c.* 1824 (hallmark). Silver fanfare trumpet in E♭, signed *T. Shaw & Co., 21 Red Lion St.* Decoration as No. 9. Crown Property: Jewel House.

ADDENDUM: Lyndesay G. Langwill, *An Index of Musical Wind-Instrument Makers* (Edinburgh, 1960), gives two Shaw instruments not in the above list: (17) Horn, William Shaw. Paris Conservatoire No. 580. (18) Brass High Sheriff's Trumpet, Shaw & Son. Bolling Hall Museum, Bradford, Yorkshire.

NOTES

[1] Adam Carse, *Musical Wind Instruments* (1939), p. 229.

[2] A trumpet by John Harris converted to a slide-trumpet, now in the possession of Anthony Baines, bears indisputable evidence that the bell was once tagged to the front bend, the two holes being clearly visible though now plugged. During the rebuild the bell was given a quarter turn in order to avoid these holes when soldering to the front bow.

[3] W. Sandys and S. A. Forster, *The History of the Violin* (1864), pp. 315, 316.

[4] The instrument was shown at the Society's Exhibitions of 1951 and 1953.

[5] Sandys and Forster, *op. cit.*

[6] City of Westminster Archives, MS A250–A253. St Anne's Poor Rate, 1775–1783.

[7] City of Westminster Archives. St Anne's Baptisms, Vol. 3, Oct. 22, 1775.

[8] The records of the Loriners Company, to which Shaw and other brass-workers may have belonged, no longer survive. Neither the Founders, Ironmongers nor the Armourers and Braziers Companies have any record of Shaw the trumpet maker. William Shaw was probably born *c.* 1754.

[9] Borough of Holborn, United Vestry of St Andrew, Holborn, and St George-the-Martyr, Queen Square, Poor Rates, 1750–1830.

[10] Guildhall Library MS 6667/13. St Andrew's Baptisms. May 23, 1785.

[11] Patent No. 5013. But see L. G. Langwill, *Index of Wind-Instrument Makers* (1960) for further particulars of the Shaws of Salop.

DONALD GILL

The Orpharion and Bandora

ABOUT the year 1599 Lady Margeret Hoby recorded in her diary that she knew how to play the orpharion but almost never, if ever, sang anything but psalms.[1] Alison's *The Psalmes of David in meter . . . to be sung and plaide upon the lute, [or] orpharion . . .* (London, 1599) must have met her needs admirably, and when we realize that twelve of the twenty-nine music books containing 'lute' tablature published between 1597 and 1622 were explicitly for lute or orpharion, and two of the three contemporary lute tutors were for orpharion and bandora as well, we begin to suspect that Margeret Hoby was by no means a rarity, except perhaps in her devotion to the psalms.

The orpharion and lute share the same tuning and basic playing techniques, so that their tablatures are identical. On the evidence of these printed music books it is clear that we are no longer justified in thinking of the vast bulk of surviving MS lute tablatures solely in terms of the gut strung lute. We must think of much of it in terms of the wire strung orpharion, with its very different tonal qualities and general characteristics. The bandora had its own distinctive tuning, and music for it can readily be identified in the tablature sources as solo pieces, song accompaniments, and consort parts. The earliest printed ayres for voice and accompanying instrument were set to the bandora,[2] and eight years earlier (1588) Munday's *A banquet of daintie conceits* was published to be sung 'either to the lute, bandora, virginalles or anie other instrument'. Much later, after the Morley, Rosseter and Leighton consort pieces with obligatory bandora, Peerson's *Mottects, or grave chamber musique* (London, 1630) were published, 'which for want of organs, may be performed on virginals, base-lute, bandora or Irish harpe'. And from other sources we are able to trace the active life of the bandora to its extinction towards the close of the century.

The earliest reference to this family of instruments is the mention of bandoras amongst the instruments used during the performance of Gascoigne's play *Jocasta* in London in 1566.[3] The London viol maker John Rose is reputed to have first 'devised and made' the bandora in 1562,[4] and there is as yet no reason to doubt this; certainly Praetorius thought the instrument was of English invention. Only ten years later, in 1572, it was proposed that there should be a teacher of music 'to play the lute, the bandora and cittern' in the projected Queen Eliza-

beth's Academy,[5] and in 1583 the inventory of Kenilworth included 'three bandoras in a case of leather'. In 1594 Francis Derrick wrote from Antwerp asking Henry Wickham to get for him 'some principal lessons for the bandora of Holborne's making, and other most cunning men in that instrument . . .',[6] showing that interest in this instrument was not confined to the professional musicians. In 1598 the Lord Admiral's Company had a treble viol, bass viol, bandora and cittern for their soft music, and Frederick Gerschow's description of the 'delightful musical entertainment' on 'organs, lutes, bandoras, mandores, violins and flutes' for an hour preceding the play at Blackfriars Theatre in 1602 is well known. In 1607 the first consort at Lord Hayes's wedding at Whitehall consisted of bass and alto lutes, a bandora, two treble violins, a double sackbut and a harpsichord.

Other references in literary sources are all in terms of complete familiarity, from Francis Bacon's *Sylva Sylvarum* (1627) to Pepys in 1662[7] and Thomas Mace in 1676.[8] Roger North described a band of itinerant players in his *Essay, of Musicall Ayre* which included two 'wire pandoras', and remarked that 'the pandoras had a better effect to fill, and adorne the sound, than any harpsichord I ever heard since',[9] but in 1697 William Turner recorded that 'several old English Instruments are laid aside, as the Orpharion . . . the Bandore, the Ghittern, Cittern etc. . . .',[10] and it is clear that most of the finger-plucked instruments fell into disuse about this time.

The orpharion first appears somewhat later in the material so far studied, and its invented name fits in with the idea that it was an adaptation of the bandora for use as an alternative to the lute. In 1583 Sir Arthur Basset asked Sir Henry Stradling to lend him his servant Thomas Richards 'and to cause him to bring with him both his instruments, as well that which is strung with wires, as his harp. . . . I have given some commendations of the man and his instruments knowledge, but chiefly for the rareness of his instrument with wires . . . to my cousin Sir Philip Sydney.'[11] This must surely be a reference to the orpharion, for the bandora was well known and the cittern commonplace at this time. There is no ambiguity about Drayton's mention of the 'Orpharion and the Lute' in a poem of 1590, but Francis Derrick's letter of 1594 speaks of 'a bandora or orphtrye', and even if we assume, as seems likely, that this curious word 'orphtrye' is a corruption of orpharion, we can only fully explain the letter by conceding that there was some confusion between the two instruments in the minds of amateur musicians of about that time. It should perhaps be mentioned that the original of this letter has not yet been examined. It is possible that the word in question might have been corrupted during its transcription.

There was, however, little excuse for confusion, since from 1590 onwards the printed music books abound with references to the orpharion, as we have seen already. As late as 1624 the *Altus* book of Pilkington's second set of Madrigals contained a Pavan for Orpharion, and there are records of Robert Tailour, the 'orpheryon and bass vyoll and poliphon player', being a member of the London Waits from 1620 to 1637. In 1656 Sir Philip Leycester included the orpharion (and the bandora) amongst the 'several Kindes of Musicall Instruments now of most Use in England, as they be now used . . .' when he was making up his Commonplace Book.[12] Twenty years later Mace mentions the Auferion with the same familiarity as the bandora, and ten or twenty years after that James Talbot refers to both instruments in the present tense in his manuscript,[13] though William Turner's comments are no doubt in better perspective.

The inventories of Parisian instrument makers discussed by Francois Lesure recently[14] have references to pandores in 1589, 1596 and 1617. (See note at end.) *Pandore* seems to have been the usual form of the word in France, and the 1617 inventory mentions 'une pandora petite' which one would suspect of being an orpharion. Mersenne was similarly confused, for in the Second Book of Stringed Instruments, Proposition II, he describes and illustrates an instrument which he calls a *pandore*, but says that it has the same number of strings and tuning as the lute. In contrast, the Trichet MS has a good section on 'la Pandore et l'Orpharion', with an intelligent discussion of the tunings, and it also contains a charming and convincing drawing of an example with seven courses.[15] It is clear from Trichet's remarks that in France the orpharion faded away with the 'luth ancien', and it was generally regarded as a rather unsympathetic instrument and hard on the fingers.

Praetorius speaks of these instruments with familiarity, giving tunings and drawings of great value.[16] In 1667 a bandora was in the inventory of the Berlin Court Orchestra,[17] and the frontispiece of Walther's *Lexicon* (1732) shows one hanging on the church wall behind the orchestra. Even later, in 1758, Adlung mentions an instrument called a *Pandoret*, which was a 'type of clavichord which is supposed to represent the sound of a Pandore', and he describes the mechanism, which could also be fitted to the *clavecin*.[18] This curious piece of information forms an unexpected postlude to the story of these instruments. In Italy, French and German sources unite, for Bonanni in his *Gabinetto Armonico* illustrates an instrument which he calls the *Cetera Tedesca del Kircher*. This turns out to be the *Typus Cytharae Communis* of Kircher's classification (1650), which in turn is almost identical with Mersenne's pandore, even to the ridiculous mistake of drawing an oblique bridge

and parallel frets. (The French version of the 1776 edition of the *Gabinetto*, incidentally, says that 'this type of Cithare resembles the pandure closely'—a statement which fails to make sense unless it is assumed that the author had the bandora in mind, not the Asiatic-type pandura which forms the subject of the preceding engraving and which was a wholly dissimilar instrument.)

In a series of household inventories collected by Walter J. Woodfill in his invaluable book *Musicians in English Society* are thirty-two inventories dating from 1565 to 1648 which mention specific musical instruments. These inventories are unselective as far as the type of instrument is concerned. One was surprised to find that there are nine bandoras and orpharions in the series, as compared with ten lutes of various sizes, three citterns and a broken gittern. Other instruments in the same series include seven organs, two regals, twenty-two virginals, two organ-harpsichords and a clavichord, as well as chests of viols, chests of violins, flutes, recorders, cornets, sackbuts, hautboys, isolated viols and a bass violin.

When Queen Elizabeth visited Kenilworth in 1575 one of the entertainments described was music by 'six severall instruments' and a singer in the 'belly of a dolphin' on the lake, 'the hole armony conveyed in tyme, tune, and temper, thus incomparably melodious'.[19] The probable composition of this sextet can be inferred from the already-mentioned inventory of Kenilworth, for besides 'an instrument of organs, regals and virginals' and 'two pairs of double virginals' there were a chest of viols, a chest of violins, a case of flutes, 'three bandoras in a case of leather' and 'three lutes in leather cases'. Only the cittern is lacking of the instruments needed for a complete Morley sextet.

Other interesting inventories in this series include that of Walton, the home of [Sir T.?] Fairfax, who in 1624 had a bass violin, an orpharion, a pair of regals, a pair of virginals and two chests of viols; and of the Viscount Kilmorey, who in 1631 had a pair of virginals, a bass viol, a lute, an orpharion, and one bandora with a case. In 1633 a certain Ludowick Bowyer is recorded as being an orpharion player, and in 1644 the Dowager Countess Rivers had 'in the great chamber, a bandora and a case'. It is curious how frequently the bandoras' cases are mentioned in these inventories. Lower down the social scale was the actor Augustine Phillips, who in 1608 bequeathed his cittern, bandora, lute and bass viol to his apprentice,[20] while further evidence of the familiarity of these instruments at professional levels is provided by a passage from *The Guardian* quoted by J. S. Manifold in his book *The Music In English Drama*; the dancer-manager of a country consort is rehearsing the musicians for a performance, and says:

Let your eyes be rivetted to my heels, and miss not
A hair's breadth of my footing: . . .
. . . And do you hear?
Wire-string and cat-gut men, and strong breathed hoboys. . . .

This passage could indeed have been addressed to the players whom Roger North met, for they consisted of 'two wire pandoras', two violins, a bass and a 'loud hautbois'.

A passage such as this, coupled with Drayton's rather more elegant reference to the 'sterner Wiry chord', reinforces the impression that all classes of musicians used these instruments extensively, and there was nothing recondite about them as far as the general public was concerned. The surviving MS tablatures provide further evidence in support of this view. Thurston Dart has identified in the Cambridge University Library MS fragments of nearly 120 pieces from the music of the Cambridge Waits, which include the usual obligatory bandora,[21] and the list of sources of English solo lute music (1540–1620) prepared by David Lumsden includes eighty-four bandora pieces in MSS dating from 1583 to 1610.[22] It is likely that there is more bandora music in existence than has yet been listed.

The surviving tutors of the period fit consistently into the picture. Le Roy's dates from before the invention of the bandora and is purely a lute tutor. Barley's *New Booke of Tablature* (London, 1596) is a tutor for the lute, the orpharion, and the bandora. In it are described the techniques basic to all three instruments with a clear description of the different touch required by the wire-strung pair. With these last the fingers must be 'easilie drawen over the stringes, and not suddenly griped, or sharplie stroken as the Lute is: for if yee should do so, then the wire stringes would clash or jarre together the one against the other; . . . Therefore it is meete that you observe the difference of the stroke.' This short passage tells us all we need to know about string tensions on these instruments. Unscaled drawings are given: the orpharion has seven courses and an oblique bridge and nut, whilst the bandora has six courses and a parallel bridge and nut. Some of the bandora tablatures, however, require seven courses. The bandora is said to be 'easie to be played upon', and 'commendable and fit, either in consort or alone', whereas the orpharion is called the 'stately Orpharion', a somewhat unexpected term but not inappropriate in the light of, for example, the instrument now at Helmingham which is about to be discussed.

Thomas Robinson's *Schoole of Musicke* (London, 1603) is said on the titlepage to be for the lute, bandora, orpharion and viol da gamba, but in fact makes no specific mention of the wire instruments in the text,

and the *Varietie of Lute Lessons* (London, 1610) deals only with the lute, as would be expected in a work of the Dowlands.

Actual examples of these instruments are excessively rare, presumably because they never acquired the aura that came to surround the lute as time went by. Two named and dated English orpharions have, however, survived, in mint form, and there is a remarkable correlation between these and the different written and graphic sources of information which we possess. A bandora of the authentic English type has yet to be found.

The earlier of the two orpharions bears John Rose's label and is dated 1580. It belongs to the Tollemaches of Helmingham, and was illustrated in *Musical Instruments, Historic, Rare and Unique* by A. J. Hipkins and W. Gibb (London, 1888). Its near perfection as a musical instrument tends to be overshadowed by the exquisite ornamentation that was lavished upon it, but close examination reveals many refinements in its string laying and fretting, which are obviously conditioned by the special problems, especially of intonation, that are encountered with lightly strung wire instruments. It has six pairs of strings and the nut and bridge are parallel. The tuning pegs are sagitally placed, as in the vihuela and bandurria of Spain. The frets are unusually low, and the nut anticipates a recent improvement to the guitar[23] by some 350 years by having a fret for the cut-off point, with the grooves for the strings cut into the wood of the head immediately above. The individual strings and courses are progressively more widely spaced as one passes from the treble to the bass ranks, to minimize the chances of that clashing together of strings of which Barley speaks. The lower ends of the strings are attached to brass hitch pins which are inserted into the substance of the bridge, a feature which seems to be unique to the orpharion and bandora.

The Francis Palmer orpharion dated 1617, in the Claudius Collection, Copenhagen (Plates II, III), is no doubt more typical of the average type of instrument. It was a matter of great interest to find that its maximum divergence from the measurements of an orpharion recorded in the Talbot MS is only one centimetre. Furthermore, both the Palmer instrument and Talbot's description have nine pairs of strings, thus indicating that the orpharion followed the same lines of development as the seventeenth-century lute. The bridge and nut converge towards the treble side, and we learn that this modification was developed early in the last decade of the sixteenth century from Francis Derrick's letter of 1594, for he amplifies his request by asking for 'a bandora or orphtrye

of the new fashion which hath the bridge and the stops slope . . .', and this feature became another characteristic of these instruments. The explanation offered by Trichet—that it was done to reduce the tension on the treble strings—seems to be correct, for the three oblique-bridged orpharions of which we have measurements all have treble strings that are significantly shorter than those of Rose's instrument, although they are of comparable size in other respects.

The nut on the Palmer orpharion is the common notched strip of bone or ivory, and the surface of the fingerboard is slightly scalloped between the frets, as was fashionable with the guitar two centuries later. The strings are attached to hitch pins in the bridge which are more widely spaced for the lower strings, as in Rose's instrument, and the peg-box is of the normal viol type that is found in all the surviving illustrations of orpharions and bandoras.

Drawings of similar instruments are to be found in Barley's *New Booke of Tablitur*e, Fludd's *Historia Utriusque Cosmi*, Praetorius's *Theatrum Instrumentorum* and Trichet's MS. Crude and unreliable drawings appear in Mersenne's Second Book of Stringed Instruments, Kitcher's *Musurgia universalis* and Bonanni's *Gabinetto Armonico*. The Praetorius and Trichet drawings show the hitch pins in the bridge unmistakeably, and only the Barley and Fludd bandoras have a parallel bridge and nut.

Principal dimensions (save for the string lengths) of a nine-course orpharion and a seven-course bandora, both with oblique bridges, are recorded in the Talbot MS. The sizes of the Praetorius instruments can be worked out with reasonable accuracy and fit in well with the Talbot instruments and the two surviving orpharions. It is possible to summarize all the information so far gathered in the following catalogue of characteristics:

The orpharion and bandora differ only in size and tuning. Obliquity of bridge and nut was a developmental feature found in both instruments, which, as well as shortening the treble strings, must also have stiffened up the soundboard very usefully. The outline of the body is fundamentally ovoid but is decorated with undulations and usually with a festooned segment. The back is flat or slightly convex, and the pegbox is normally of the viol type, topped by an ornamental head. Most examples have fifteen frets, and the junction of neck and body is usually just short of the octave fret, though not in the Barley and Trichet drawings, where it is just beyond this point. It is impossible to say at present whether this was a normal variation or the result of identical inaccuracies of draughtsmanship in widely separated sources.

Strings were of brass, or brass and steel,[24] and we have Bacon's

authority for saying that they were accurately drawn.[25] Frets were of brass,[26] and the lower strings were made up of two or more twisted strands.[27] They therefore differ from the modern overspun type of string. At first, six courses were used, but by the last decade of the sixteenth century seven were needed on both orpharion and bandora. The bandora thereafter remained stable, but the orpharion equalled the lute in variability. Praetorius illustrates one with seven courses but gives tunings for an eight-course instrument, and we have already mentioned that the Palmer and Talbot examples have nine courses. In his notes Talbot says the orpharion has nine or seven courses, and adds that some had seven fingerboard courses and five bass ranks in octaves carried to a series of ever lengthening heads 'like ye English Theorbo'. He also says that the bandora had its lower four courses tuned in octaves, whereas Barley implies unison tuning in all.

The bandora tuning was *C D G c e a* or *G' C D G c e a*. Praetorius gives one alternative, *C D G c f a d'*, which does not appear in the English sources. The economy and effectiveness of the normal tuning is most impressive. With only seven courses the instrument's range on the open strings, all of which can be fingered chromatically, is only one tone less deep than the fourteen-course non-chromatic archlute and rises four tones higher on the treble strings. Nor is its music plagued by the unpleasant chord inversions that occur in the archlute because the upper two courses have to be tuned an octave below their proper pitch on account of the great string length. The left hand fingerings on the bandora are very comfortable when playing in the common keys. To find another tuning at all like the bandora's we have to turn to Bermudo (1555),[28] whose seven course vihuela was tuned *G' C F G c f g*. Both tunings seem to owe nothing to the lute or cittern, and the close links between England and Spain in the years when the idea of the bandora was germinating may be of significance in the search for ancestry. Perhaps the bandurria, an instrument of the same fundamental type as the bandora, may have been a starting point in the development of the English instrument. In Bermudo's time the bandurria sometimes had five pairs of strings and fifteen frets,[29] and it is a reasonable assumption that it was known in England; at least we know that Henry the Eighth had four vihuelas.[30]

Lutes and theorboes were sometimes strung with wire,[31] and it does seem that a need was felt for something more sonorous or less temperamental than the catgut instruments. Rose may have been the maker who first realized that the lute form had not the intrinsic strength to withstand the pull of wire strings, and adopted the structurally and perhaps acoustically more satisfactory flat-backed form for his experi-

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ments. The characteristic undulant outline would have been no more than an expression of the decorative impulse widespread amongst contemporary luthiers. The method of string attachment to the bridge is apparently unique to these instruments and may well have been an invented feature.

Praetorius's *Penorcon* has been included in the table of instruments appended to this article, although the name does not appear elsewhere. It was midway in size between the orpharion and bandora, and was tuned to the pitch and intervals of the bass lute. Could the elusive English stump have been such an instrument?

The *polyphone* or *poliphant* should also be briefly mentioned, for it was to the bandora family what the *angelique* was to the lute—a many-stringed and almost entirely diatonic instrument of the seventeenth century. The 'Excellent Instrument called the Poliphant, not much unlike a LUTE, but strung with wire . . .' that Queen Elizabeth often played according to 'an ancient Musician and her servant',[32] is most unlikely to have been a poliphant, which was something of a curiosity and probably had not been invented during her lifetime; but it may well have been an orpharion, which was not too much unlike the lute and was used by many a dilettante musician of the governing classes. The story gains interest in the light of the traditional connection of the princely Helmingham orpharion with the Queen.

This article uses much material first brought to light by other workers, often incidentally to their own work. By extracting as much as possible of what was relevant to the subject under consideration and combining it with study of the available graphic evidence and surviving instruments, some more knowledge of this rather vaguely comprehended family has been gained. As to their musical value, one can say that the tone of the Rose orpharion is pure, sweet and surprisingly resonant, more like a finger-plucked psaltery or wire-strung harp than any modern instrument. It is easy to imagine the rich sound of the bandora, and the harmonic fullness that would result from the use of the bandora and cittern together in consorts. They were clearly a family in their own right, with their own definitive characteristics by which they can be easily recognized, and their shapes and sounds must be added to those others which we associate with Elizabethan and Jacobean music-making if we are to preserve a faithful and living sound picture of those times.

NOTES

Baron Tollemache of Helmingham very kindly allowed me to examine and record the measurements of the Rose orpharion, and Dr Henrik Glahn gave

invaluable assistance by providing photographs and a full size outline drawing of the Palmer orpharion in the Claudius Collection. Mr Richard Newton and Mr Thurston Dart both helped to set this investigation going, but the data and conclusions arrived at are solely the responsibility of the writer.

FRENCH INSTRUMENTS. A painting in the Louvre, 'Fête de la trêve de 1609' by Van der Venne, includes a very realistic broken consort consisting of a virginal, treble violin, bass violin, bandora (7-course), lute (8-course), treble recorder, bass recorder and a harp. The head, neck and shoulders of the bandora are unmistakable, but the rest of the instrument is hidden by the player's body. Trichet says of the bandora 'L'usage de cet instrument peut servir beaucoup aux concerts qu'on faict de plusieurs sortes d'instruments; car il semble qu'ils deviennent plus harmonieux par la communication et meslange de son doux tempérament.' There is a reproduction of the consort in detail in *Larousse de la Musique* (Paris, 1957).

[1] Lady Margeret Hoby, *Diary* (1599–1605), ed. Meads, quoted by W. J. Woodfill in *Musicians in English Society* (Princeton, 1953), p. 209.

[2] T. Dart, 'The Cittern and its English Music', *Galpin Society Journal*, I, p. 47.

[3] F. W. Galpin, *Old English Instruments of Music* (1910), p. 31.

[4] J. Stow, *Annales, or a general Chronicle of England* (London, 1631), p. 869: 'In the fourth yere of Queen Elizabeth, John Rose, dwelling in Bridewell, devised and made an instrument with wyer strings, commonly called the Bandora, and left a son, far excelling himselfe in making Bandores, Voyall de Gamboes, and other instruments.'

[5] M. C. Boyd, *Elizabethan Music and Musical Criticism* (Philadelphia, 1940), p. 15.

[6] Hatfield MS part 4, quoted by Gratton Flood in *The Musical Times*, 1928, p. 511.

[7] S. Pepys, *Diary*, October 15, 1662.

[8] T. Mace, *Musick's Monument* (London, 1676), p. 70.

[9] R. North, *Essay, of Musicall Ayre* (British Museum, Add. MS 32536, f. 66). I am indebted to Mr M. Tilmouth for this reference.

[10] M. Tilmouth, 'Some Improvements in Music noted by William Turner in 1697', *Galpin Society Journal*, X, pp. 57–59.

[11] W. J. Woodfill, *op. cit.* (note 1), p. 235.

[12] Sir Philip Leycester's MS Commonplace Book, quoted in *Captain Cox or Robert Laneham's Letter*, ed. F. J. Furnivall, Ballad Society (London, 1871).

[13] James Talbot MS (Christ Church Library, Oxford, Music MS 1187), ff. 13 and 31.

[14] F. Lesure, 'La Facture Instrumentale à Paris au Seizième Siècle', *Galpin Society Journal*, VII, p. 11.

[15] F. Lesure, 'Le Traité des Instruments de Musique de Pierre Trichet', *Annales Musicologiques du Moyen age et Renaissence*, vol. IV, 1953. Mr Thurston Dart drew my attention to this little known source.

[16] M. Praetorius, *Syntagma Musicum* (1619), vol. II, p. 28 and plate XVII.

[17] C. Sachs, *Real-lexicon der Musikinstrumente* (Berlin, 1913), under Pandore.

[18] J. Adlung, *Anleitung zu der Musikalischen Gelehrtheit* (Erfurt, 1758), p. 575.

[19] *Captain Cox or Robert Laneham's Letter.* See above, note 12.

[20] *Lute Society Journal*, vol. I, No. 2, 1957, p. 31.

[21] T. Dart, Introduction to: Two Consort Lessons collected by Thomas Morley (London: Stainer & Bell Ltd.).

[22] *Galpin Society Journal*, VI, pp. 14–22.

[23] *Galpin Society Journal*, IX, p. 18.

[24] M. Praetorius, *op. cit.*, pp. 53–54.

[25] F. Bacon, *Sylva Sylvarum* (London, 1627), Century II, para. 171.

[26] Sir Philip Leycester, *op. cit.*, ff. 89–90.

[27] M. Praetorius, *op. cit.*, pp. 53–54.

F. Bacon, *op. cit.*, Century II, para. 170: 'a *Wreathed String*, such as are in the Base Strings of *Bandoraes*. . . .'

Trichet, *op. cit.*, says the biggest strings were 'retortillées'.

[28] J. Bermudo, *Declaración de Instrumentos musicales* (1555), Libro quarto, f. 104.

[29] *Ibid.*, f. 98.

[30] British Museum, Harl. MS 1419 (1547): 'Item. Foure Gitterons with iiii cases to them: they are called Spanishe Vialles.' This is one entry in an inventory of possessions of Henry the Eighth.

[31] J. Tinctoris, 'De Inventione et Usu Musicae' (*c.* 1488), Book IV. See *Galpin Society Journal*, III, p. 22.

M. Praetorius, *op. cit.*, p. 52.

M. Drayton, *Polyolbion* (1613), Song IV.

[32] J. Playford, *Introduction to the Skill of Music* (1683), f. A7'.

APPENDIX A

BASIC DIMENSIONS OF SEVEN INSTRUMENTS mentioned in the text (in cms.).

	ORPHARIONS				PENORCON	BANDORAS	
	Rose	*Palmer*	*Talbot*	*Praetorius*	*Praetorius*	*Talbot*	*Praetorius*
Length of body	40.5	43.0	42.0	45.0	50.5	55.9	53.0
Max. width	30.0	27.0	26.0	28.5	35.0	33.7	35.0
Length of fingerboard:							
Treble side	29.0	25.5	25.5	26.0	29.5	34.3	34.5
Bass side	29.0	28.0	28.0	28.5	33.0	36.8	37.0
Depth of body	4.2–6.7	7.5	7.0	?	?	8.9	?
String lengths:							
Treble	59.8	53.5	53.5	57.5	64.0	74.0	73.0
Bass	59.8	60.5	60.5	64.0	74.0	80.0	79.0
No. of frets	15	15	15	13	13	15	15
No. of courses	6	9	9	7	9	7	7

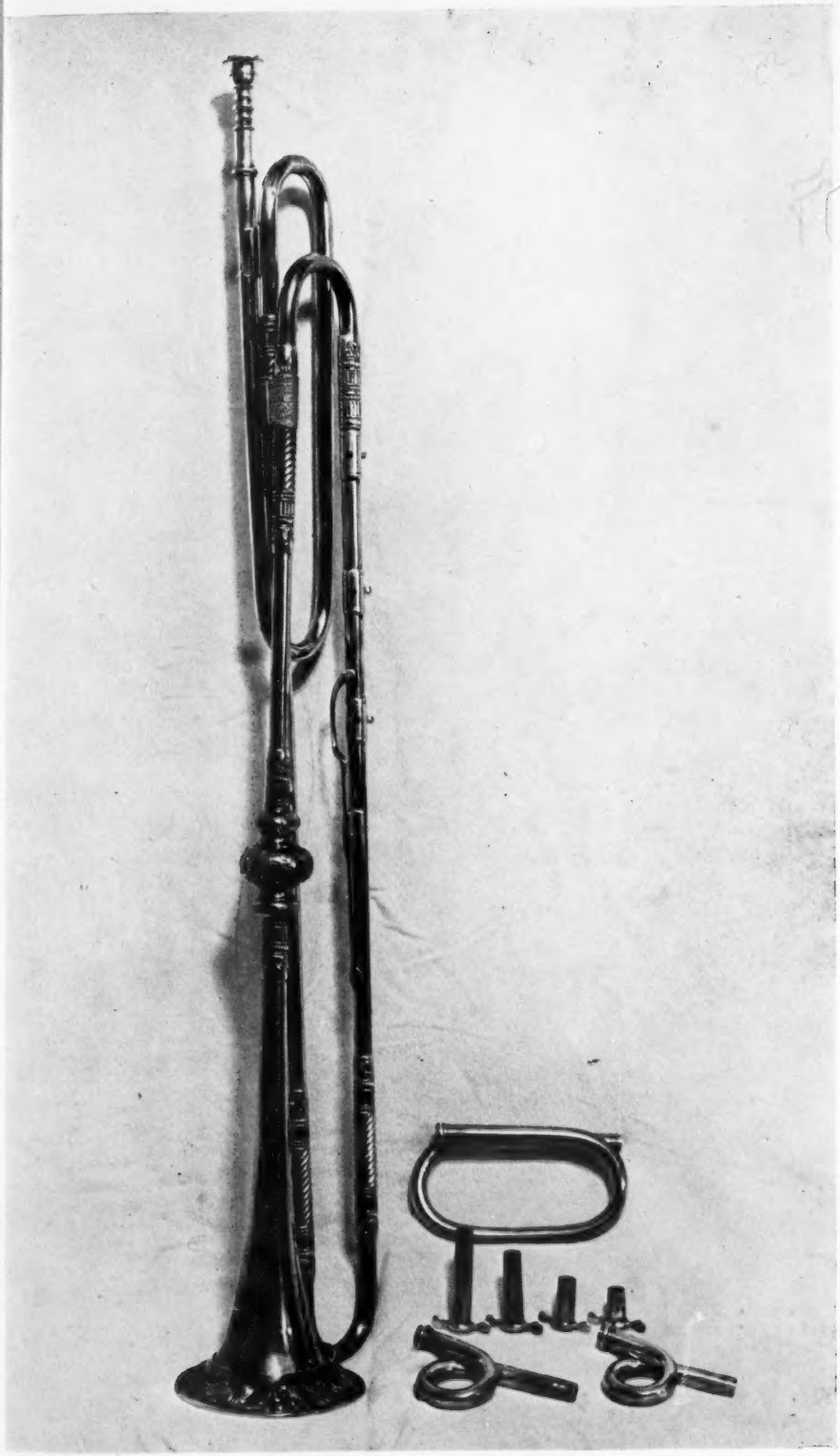


PLATE I *Trumpet by William Shaw, 1787.* (*See p. 7.*)
(*Crown Copyright.*)

PLATE II *Orpharion by Francis Palmer, 1617. The Claudius Collection, Copenhagen. Front.* (*See p. 19.*) (*Photos, E. Hansen, Copenhagen.*)

PLATE III *Orpharion by Francis Palmer, 1617. Back and side.*

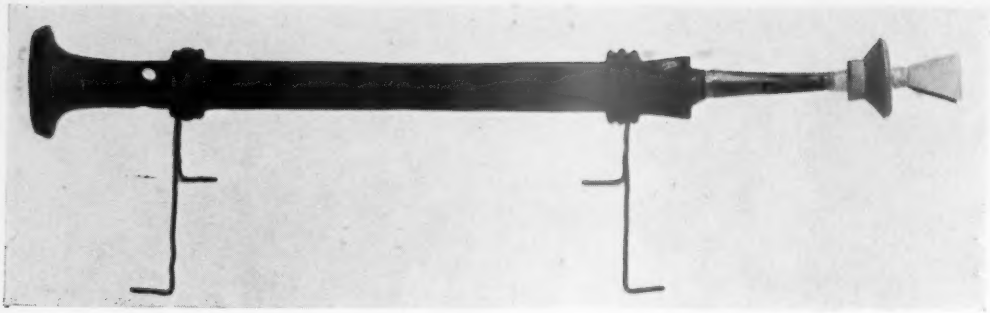
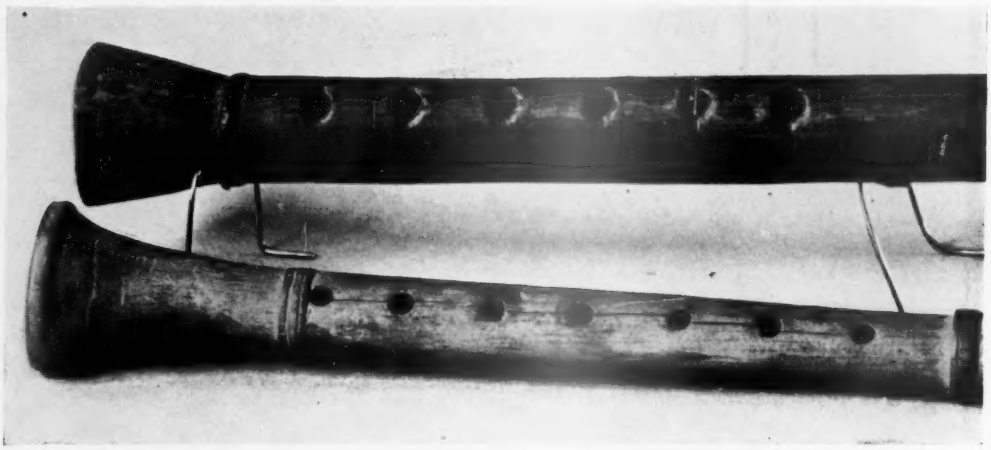


PLATE IV *a. Chirimia, Guatemala City. Charles McNett.* (*See p. 44.*)

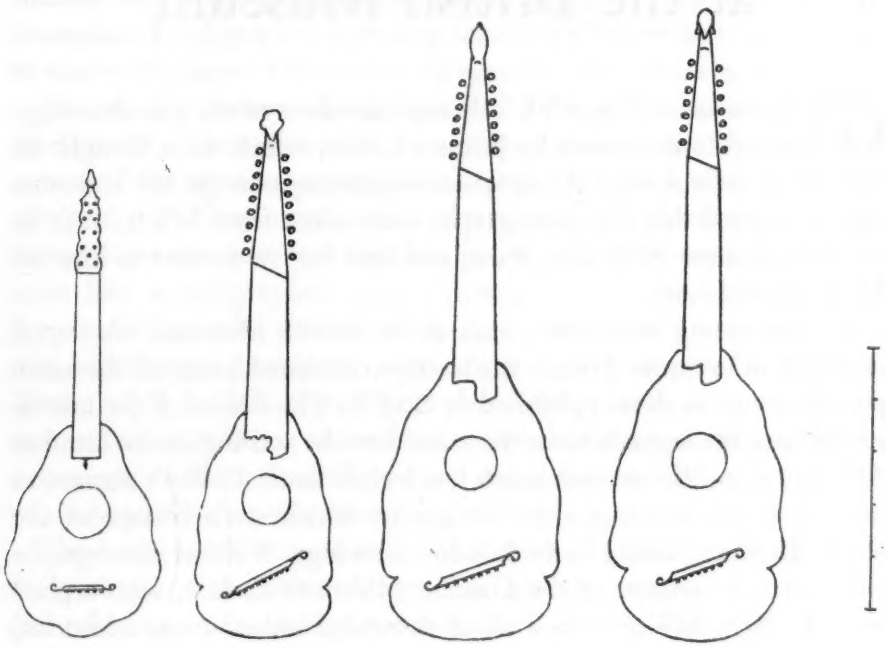


b. Chirimias, Guatemala. Above: Hamburgische Museum für Völkerkunde und Vorgeschichte. Below: Franz Termer Collection.

The Talbot string lengths are estimated from drawings made from the dimensions given in the MS. The Praetorius dimensions are subject to errors probably of the order of ±0.5 cm. at least, because of the thickness of the lines in the drawings and the small size of the drawings.

APPENDIX B

OUTLINES OF FOUR AUTHENTIC INSTRUMENTS



Rose 1580 | *Palmer* 1617 | *Praetorius* 1619 | *Talbot MS* *late 17th C.* (*dimensions in MS*)

ORPHARIONS | BANDORAS

APPENDIX C

FREQUENCY OF VARIANT SPELLINGS

from a wide variety of contemporary printed and MS sources.

Orpharion 16	Orphorion 1	Bandoer 1 (German)
(Orpharyon)	Orpheoreon 2 (one German)	Pandora 5 (one German)
Orpherion 8	Bandora 13	Pandore 7 (five French)
(Orpheryon)	Bandore 4	

Orph-arion occurs once, in '*Sacred hymns . . .*' by [Sir Edwin Sandys] and Robert Tailour (London: 1615). Tailour was presumably the orpharion player in the London Waits from 1620 to 1637.

The names orpharion and bandora have been used in this paper on the statistical grounds noted above, in the absence of any clear etymological indications.

SUSI JEANS AND GUY OLDHAM

The Drawings of Musical Instruments in MS Add. 30342 at the British Museum

GSJ X contains (Plates VI–VII) reproductions of six pen drawings of musical instruments by Jacques Cellier, which were thought to have been made about 1585. In an accompanying note (p. 88) Thurston Dart explained that the photographs were taken from MS fr. 9152 in the Bibliothèque Nationale, Paris, and that they were sent to him by M. François Lesure.

On examining MS Add. 30342 at the British Museum, we found that this anonymous French manuscript contained some of the same pen drawings as those published in *GSJ* X. The names of the instruments, and the legends were the same, but the writing in the London MS was in a different and much less legible hand. Cellier's signatures as well as the arabesque-like ornaments which are a feature of the Paris MS were missing in the London drawings. We sent photographs of all the instruments in the London MS to M. Lesure, who replied that the Paris MS contained all of them and indeed some additional ones. He also informed us that there existed another manuscript collection of drawings by Cellier at Reims, amongst them the drawing of the organ case of the Cathedral, about which Norbert Dufourcq[1] had written, but that otherwise none of the MSS had been thoroughly examined.[2]

We obtained microfilms of both the Paris and Reims MSS, so that we should be able to study Cellier's work thoroughly, and found that the Reims manuscript (Bibliothèque Municipale, Reims, MS 971) was related to neither the Paris nor the London MS. Of later origin and of greater beauty, it specializes in ornamental designs and calligraphy. Apart from the two superb drawings of the organs at Reims, the musical instruments depicted are used only as ornaments in the richly designed borders of the folios.

The Paris MS is a magnificent volume of $14\frac{1}{4} \times 8\frac{3}{8}$ in. Its author, François Merlin, a very learned man, calls it a 'Recherche de plusieurs Singularités' and describes himself as controller of the household of the late Marie Elizabeth, only daughter of the late King Charles IX. He

also mentions that the pictures and writings are by Jacques Cellier of Reims. The MS was commenced on March 3, 1583, and finished on September 10, 1587, when Merlin presented it to King Henry III. With the exception of a dedication to the king, the volume consists of a collection of superb pen drawings executed in black ink and representing a typical sixteenth-century selection of subjects from the sciences and arts. The subjects represented are architecture, heraldry, music and musical instruments, astrolabes, fortifications as well as numerous examples of calligraphy, including the Lord's Prayer and the alphabet in many languages. The section on musical instruments is dated 1585.

Not much is known about François Merlin except what appears in the Paris MS. There is however a possibility that he was identical with a man of the same name, who was a priest at Saint Catherine du Val des Ecoliers.[3] There exists also a letter written by Merlin,[4] in which he mentions that he is looking for a young and honest man who could serve him as calligrapher. Such a person he seems to have found in Jacques Cellier, who was not only a fine calligrapher and designer but also a musician. According to the *Dictionaire de Biographie Française* (Paris, 1956) J. Cellier was born about the middle of the sixteenth century, died at Reims about 1620, and held successive appointments as organist at the Cathedrals of Laon and Reims. A plan of his for the rebuilding of Reims was printed in 1618.

The London MS is quite small, $6\frac{5}{8} \times 4\frac{3}{8}$ in., ff. 191. It is described in the catalogue of the British Museum as 'Miscellaneous tracts in French' and of seventeenth- or eighteenth-century origin. This is an obvious error, because the watermark on f. 57 is almost identical with No. 4444 in Briquet's *Les Filigranes*, and was in use in the 1580s. The MS belonged once to the College of Jesuits in Paris. The first part of it is taken up by treatises on government and on how to maintain peace, a memoir on the precedence at ceremonies on State occasions, a list of genealogies of noble French families, a copy of the will of the Duke of Anjou (the King's brother) dated 1584, and a report on the trial of Mary, Queen of Scots. Then follows a collection of pen drawings very similar to those in the Paris MS. There are, however, some differences. The London MS contains many more drawings of coats of arms, but no architectural drawings. There are fewer musical instruments, but all the instruments here are definitely the same as those in the Paris MS. Even the mistakes are the same, such as the reversed order of organ pipes on the positive/regal and the wrong arrangement of keys for sharps on the manicordion. A very close inspection of the instruments reveals that the instruments in the London MS were drawn with more scientific accuracy and a better knowledge of perspective (e.g. the

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hurdy-gurdy). The legends in the London MS are written in the same hurried and not very legible hand as the treatises, but the contents of the legends and the musical tablatures are the same in both manuscripts. There are usually several instruments crowded on to one page in the London MS, while in the Paris MS only one instrument is drawn on a page, surrounded by ornamented drawings and frequently signed by Cellier. There are no dates or signatures in the London collection with one exception: in a fascinating example of calligraphy on f. 173—a very small circle filled up with minute handwriting in minuscule—there is the following inscription 'De la mane di Mercurio Vecchio'. Round the name are grouped four not easily recognizable figures which, when put into the right order, make up the date 1588. The writing inside the small circle reveals a sonnet which begins 'Bienque petit Jesus . . .'. A similar example of calligraphy is in the Paris MS on f. 2, but here the little circle contains a sonnet for the King, a sort of poetical dedication of Merlin's work to the King. There are, however, no other inscriptions or signatures on the folio, though the phrase 'de la main de Jacques Cellier' appears on the title page to the section on alphabets (f. 36).

It seems to us that the London MS could be possibly Merlin's own book. The Memoir about the precedence on State occasions, the genealogies of the noble families and the many coats of arms could have been of interest only to him and not to Cellier, who was a designer and organist. We think that Merlin made up his collection by having copies made of interesting pictures which he found in several scientific treatises and books on calligraphy. The musical instruments were copies from a probably still unknown printed source. This would explain the reversed order of organ pipes, a thing which can be met fairly frequently in early engravings. It is established without doubt that Merlin engaged Cellier to do all the pictures and writings in the presentation volume to the King (the Paris MS). It is very likely that Merlin wanted to keep a record of this collection, and that he engaged someone to copy perhaps a smaller number of subjects into his own book. We first thought that he would have again engaged Cellier, but the scribe engaged on the work in the London MS was more scientifically accurate. At one time we thought that Merlin himself could have done this work, but the drawings and calligraphical examples in the London MS are of such a high order, that if Merlin could have executed these he could have also done the drawings in the volume for the King and would not have needed Cellier. We came to the conclusion that the London and Paris MSS were not copied from each other, but that they were copied independently by two different calligraphers from the same sources.

We know that the calligrapher of the Paris MS was Jacques Cellier and we suggest that the calligrapher of the London MS was 'Mercurio Vecchio'. Nothing is known about Mercurio Vecchio, but perhaps further research will enlighten us.

We want to express our thanks to M. Lesure and to the staff of the Department of Manuscripts at the British Museum who have given us so much help. We add lists and legends of all the musical instruments.

DRAWINGS OF INSTRUMENTS

		Brit. Mus. MS Add. 30342	Paris MS fr. 9152
Vielle	Hurdy Gurdy	144	173
Cistre	Cittern	„	186
Tambora	Turkish Tanbur	„	180
Harpe	Harp	144 v	176, 163
Cymbale	Triangle	„	185
Accord de haulbois	Shawm Band	145	169
Accord de Cornets a Bouquin	Consort of Cornetts	„	172
Enclume	Anvil with musical glasses	145 v	170
Guiterne	Guitar	„	190
Psalterion	Psaltery	„	171
Manicordion	Clavichord	146	182
Regalles	Organ with regal	146 v	183
Lire	Lyre	147	187
Carillon	4 Bells	„	179
Espinette	Virginals	147 v	189
Orgues grosses et petites	2 manual Organ		74, 75
Mandore	Mandora		166
Tabourins	Various Drums		167
Trompette	Trumpet		168
Fluttes dallemans	Transverse Flutes		174, 163
Violle	Viol		175, 163
Cornemuse	Bagpipes		177
Violon	Violin		178
Sonnettes	Jingle Bells		181
Lvth	Lute		184, 163
Cloches	Carillon		188
[Syrinx]	Panpipes		192

Contents of MS Add. 30342, ff. 144–147 v, with transcriptions of legends:

144 Vielle, on ne joue q(ue) dune main sur le Clauier, dispose/environ c(om)me celle de lespinette selon lordre de la gamme,

Cistre,

Tambora. Instrument semblable au Cistre dequoy les/azamoglans ou enfans du tribut du turc jouent (communement)/mesmes en allant par les Rues, l(e) q(ue)l instrument mesle auec larmonie/de le(urs) voix nest moings plaisant a ouyr q(ue) les Roues de/Charetes normelleme(nt) f(ai)stes de ce pays auec grace de mesmes

144 v Harpe sa tablature semblable de/L espinette et est la situa(ti)on de la gamme/sus un clauier despinette c(om)me se voie icy/aux l(ettr)es de la gamme.
Cymbale.

145 Accord de haulbois,
Pedalle./Sacquebute, bassecontre,/Taille, hautecontre, est de mesmes mais plus petite,/dessus./Cornet autre dessus,

Accord de Cornets a Bouquin,
Pedalle./fault la sacquebute,/Taille/hautecontre,/dessus

145 v Ut re mi fa sol la: la sol fa mi re ut [*g a b c' d' e' e' d' c' b a g*].
Guiterne La grosse corde sacorde auec la suyuante a la quarte &/la suyuante auec la 3e a la tierce & la tierce auec la/quarte a la quarte.

Psalterion Il y a plus.rs sortes de psalterions, les uns ou on joue/auec 2 plumes des 2 mains & sont les plus imparfaicts parce q/on ne peult f(air)e au plus q(ue) 2 accordz, ceux de q on joue auec/les doibts en pinsant sont les plus parf(ai)cts com(me) 3. ou 4 accordz, non po(ur) estre mesler/sy p(ar)f(ai)ctm(ent) q(ue) lespinette

146 Manicordion, differe seuleme(nt) de lespinette en ce quil se touche seuleme(nt) par/tipanes a descouuert, et l'espinette par petites plumes et sauteraux/a descouuert.

146 v Regalles & Jeu de trois piedz ensemble.

147 Lire se joue quasy c(om)me la harpe.
fa la sol. fa.

147 v Espinette.

The tuning of the cittern is not given but the strings are carefully drawn showing four courses of three strings each except the uppermost which has two. That part of the strings between the free bridge and the hitch pins has been omitted in the London MS. It is shown in the Paris MS but there an extra single bass string has crept in.

The tambora, although described as resembling the cittern, nevertheless has a rounded back and is therefore a true lute as its name implies. It is drawn with 9 pegs, but only 3 double and 1 single courses passing over a movable bridge to a fixed bridge very low down on the belly.

The triangle has six rings and is joined at the top, not open as in the modern triangle.

The tuning of the guitar is given twice as *g c' c e a d'*. This probably represents five courses tuned *Gg cc' ee aa d'd'*.

The regalles is a table organ of three octaves showing the pipes of the 3 ft. principal with the regal pipes which have resonators all of the same length in front. N.B. Pipes reversed; see above.

A tuning is given for the mandore which is somewhat ambiguous but appears to indicate four strings separated by intervals of a fifth, a fourth, and a fifth.

NOTES

[1] N. Dufourcq, *Esquisse d'une histoire del' orgue en France*, Paris, 1935.

[2] References to some of the instruments in MS fr. 9152: F. Raugel, *Les Organistes*, Paris, 1923. Pp. 41, 65.

References to the instruments in MS Add. 30342: A. C. Baines, see article 'Shawm' in *Grove's Dictionary*, 5th edn.; G. F. Oldham, '2 pieces for 5-part shawm band by Louis Couperin', Joint Music Congress, Cambridge, June 1959. (In the press.)

[3] H. Jadart, *Les dessins de J. Cellier*, Paris, 1900.

[4] *Ibid.*

CECIL CLUTTON

The Seventeenth-Century Organ at Adlington Hall

ADLINGTON HALL has been the home of the Legh family since 1315. The nearest large town is Macclesfield, Cheshire. The house is part half timbered, and part Georgian stone and brick. The Great Hall dates from the late fifteenth century. It is some twelve yards long and as many high to the peak of the fine open timber roof. At one end is a gallery, and on it stands an organ which, until 1959, had not produced a sound within living memory (Plate V). There was a tradition that it had been designed and played upon by Handel, and made by the local firm of Glyn & Parker. Handel was a friend of the Leghs and is known to have stayed at Adlington Hall in 1741–42, so that he certainly must have played on the organ. His manuscript of the 'Hunting Song' is still kept at the Hall, inscribed by Handel as 'Presented by him in this his own hand Writing to Charles Legh Esq. in the year 1751'.

In 1954 the Historic Buildings Council made a grant towards urgently-needed repairs to the house and they asked me to advise them as to whether the organ merited an additional grant, in view of its historic associations. I accordingly visited Adlington and found in the organ a scene of desolation such as I have never seen before. It gave me the impression that someone had deliberately jumped into the organ and trampled on the pipes, and this had obviously happened a very long time ago, as some ¾ in. of dust lay undisturbed on any flat surfaces.

However, closer inspection made me increasingly certain that, whether or not Handel played on the organ, he certainly did not design it. It almost certainly existed before he was even born. It seems to me remarkable that the Handel-design tradition has never previously been questioned, since considered solely as a piece of furniture, the case is manifestly a 17th-century composition and has no 18th-century quality whatever. The same also applies to the pipes, especially the reeds, which have wooden blocks. The flue pipes have wide-open foot holes, certainly larger than was current at any time during the eighteenth century. The console, also original, suggested an early date, having short ebony naturals and one or two surviving, very short ivory sharps. The stops are solid lumps of wood on square shanks with labels on the jambs, in

a 17th-century style of script, and only two are missing. The compass is ostensibly four octaves and a third, B to D, but bottom B and C♯ sound low G and A respectively. There are two manuals, the Great being played from the upper set of keys and the Choir from the lower, in current 17th- and early 18th-century practice. There is also a most extraordinary pedal board with a compass of 2½ octaves, but only 32 in. wide. It could only have been played with the toes, certainly not with the feet. It was evidently intended to be coupled to the Choir keys, but had never been connected. Perhaps Charles Legh had heard about such things and decided to fit one before a visit by Handel. If so, his tact must have been sorely tried in explaining its uselessness! It has been preserved, but not replaced in the organ.

I advised the Historic Buildings Council that the organ was of far greater interest than if it had been designed by Handel, since despite its ruinous state, it appeared never to have been modified in any way at all and was thus a unique specimen of 17th-century British organ-building. I estimated that of the 600-odd pipes one-third were missing, and one-third squashed beyond redemption. Despite this, I thought the organ worthy of restoration, because of its extreme rarity. As will appear later, my estimate proved to be unduly pessimistic, but luckily the Historic Buildings Council was not put off by it, despite some ill-informed barracking by an uninvited 'expert'. An estimate was obtained from Mr Noel Mander, who, by now, has a probably unrivalled experience of restoring (as opposed to destroying) early British organs, and the work was authorized. In the course of executing it several interesting things came to light.

In the first place, Mr Mander, from his past experience, expressed his conviction that the organ was wholly or partly the work of 'Father' Smith, since the pipes are exactly like known Smith pipework. He hoped to find a signature inside the windchests, but was disappointed, although the barring was lettered in German, which seems pretty conclusive, since no German builder but Smith is known to have been working in England in the post-Restoration years.

Mr Mander also came to the conclusion that the Smith organ was not entirely new in Smith's day. The lower frame of pipes in the case were originally speaking pipes, like a German Brustwerk, but they have clearly never been connected to the organ as now existing. Also, the Great Principal pipes both look, and sound, older than all the other pipes. Possibly therefore there was an organ in the Hall before 1650, or else an existing organ was brought to the Hall and erected by Smith with mostly new pipes. In the latter case, the date of erection could be 1693, when John and Lady Isabella Legh married, and their arms are

mounted above the organ, although in a style manifestly later than the rest of the case.

As dismantling proceeded, the date of the 'catastrophe' began to crystallize. The only evidence of any work having been done to the organ was some playing-cards which had been used as packing. Messrs de la Rue identified these as about 1780. Again, from the rate at which dust accumulates in country air, the deposit here suggested that the organ had not been touched for at least 150 years. It therefore looks as though the organ met its Waterloo around the time of Trafalgar; perhaps some young Leghs found it an amusing place to romp in.

Until the organ was taken apart, it was difficult to tell what stops belonged to which keyboard, since all the pipes stand on a common soundboard measuring 8 ft. wide and 4 ft. deep. This is made entirely of oak, and the construction is, as far as is known, a unique survival. There are double the normal number of bars, and two pallets to each note, one controlled from either keyboard. The stop sliders, however, only register with the pallets of the keyboard to which they belong. One stop, however—the Stopped Diapason—can be played from both keyboards. Its pipes are mounted on a small supplementary chest, on top of the main chest. If the stop was drawn on both manuals simultaneously, but only played from one (as may frequently happen) the wind admitted by one set of pallets would leak away through the others. The subsidiary chest therefore contains a series of one-way, or 'clack' valves, two to each pipe. Even so, considerable leakages occur and the arrangement is far from satisfactory as a piece of design, however carefully executed. It is an alarmingly complicated way of saving one set of pipes, though it might possibly be justifiable if several stops were made doubly available. Renatus Harris did a lot of this borrowing or, as he called it, 'transmission' (e.g. Salisbury Cathedral, 1710). No example of it by him survives, but this was presumably how he did it. In the only other untouched surviving 17th-century two-manual British organ, also by Smith, at Compton Winyates, Smith again did some borrowing, but as that organ (unfortunately in scarcely playable condition) has never been taken apart within living memory, it is not known whether it follows the same pattern. Apart from these two I know of no other use of borrowing by Smith. At Compton Winyates there was some point in it, since it is a chamber organ, built to the most cramped dimensions. But at Adlington space was no object and I regard this as another reason for supposing that if the organ was indeed made by Smith, it was not with entirely new materials.

When the pipes were spread out in Mr Mander's factory (Plate VI) they presented a spectacle possibly even more gloomy than when they

were in position in the organ. The front pipes, nearly all of which speak, have a high percentage of tin. The interior metal pipes however have a high lead content and in the largest, 10 ft. pipes of the diapason, their softness had caused them to concertina under their own weight. These have been supplied with new, hard feet and the pipes have been supported at three points which it is hoped will stop a recurrence of this trouble. The oak pipes were mostly in good condition though some had fallen apart where the glue had failed. A few had to be replaced and these have been made exact replicas, but left their natural colour so that they may be distinguished from the old pipes, which have turned dark with age. The metal pipes are lightly nicked, in typical late 17th-century style. The wooden pipes are un-nicked. The wind pressure is $2\frac{5}{8}$ in.

Despite the terrible state of the pipework Mr Mander and his pipemaker were so bent upon saving everything that could possibly be preserved that in the end only two dozen new pipes had to be made. This, needless to say, was a much more expensive undertaking than making all new pipes. As a result, the organ is almost entirely original and, owing to its strange history, unaltered. Setting aside small chamber organs it thus shares with the Compenius organ at Frederiksborg in Denmark the distinction of being the only 17th-century organ to have survived in completely original condition.

On the mechanical side, little needed to be replaced. The original diagonal bellows remain, and could easily be put into use as an alternative to the electric blower which has been added as the only concession to modern convenience.

The specification of the organ is as follows, preserving the original spelling from the surviving labels, except in the two stops marked * where the labels are missing.

GREAT ORGAN	(pitch: feet)		(pitch: feet)
Opn Diopason	8	Sm Twelfth	$1\frac{1}{3}$
St Diopason	8	2 & Twenty	1
Principall	4	*Vox Humana	8
Gt Twelfth	$2\frac{2}{3}$	*Trumpet	8
Fifteenth	2	CHOIR ORGAN	
Bl Flute Bas }	2	St Diopason ch.	8
Bl Flute Trib }		St Flute ch.	4
Ters	$1\frac{3}{5}$	Bassoon ch.	8

This specification is interesting and unusual. In the first place, although all these separate mutation ranks are to be found in 17th-

century, post-Commonwealth, British organs, there is no other example of the 17th, 19th and 22nd being provided separately before the introduction of a mixture stop. The practice used here is far more typical of Italian practice throughout the 16th, 17th and 18th centuries. The mutation ranks are all of principal scale so that in aggregate they produce the effect of a normal diapason chorus. Separately, they afford a number of solo mutation effects. The presence of a large scale 2 ft. flute, drawing in halves (the only stop to do so), to the exclusion of a 4 ft. flute, on the Great, is also unusual in Britain, although quite usual in contemporary North German practice—another pointer to Father Smith authorship. The nineteenth ('Small Twelfth') breaks back at top F to a twelfth, while the twenty second breaks back for the whole of the top octave to a nineteenth.

Among the many colourful effects obtainable from this Great organ may be cited:

Stopped diapason and block flute.

Stopped diapason, 12th and 17th (Sesquialtera).

Stopped diapason, 12th, block flute and 17th (the best combination as a 'solo cornet').

Open or stopped diapason, fifteenth and nineteenth (as a small chorus).

The Vox Humana is really a Regal and may possibly even have been so labelled, its short resonators having no organized relationship to the pitch. Owing to the paper-thinness of the reeds (necessarily renewed, but enough of the old ones remained to obtain the correct thickness) the stop, as the other reeds, is unstable, and best drawn with the block flute which covers up irregularities. If to this be added the Seventeenth (Ters) a most verisimilitudinous bagpipe is obtained.

The Trumpet is a really excellent stop. Like the Vox Humana, it is unstable, and however carefully regulated, never stays so for long together; however, following the practice recommended in Mersenne's *Harmonie Universelle* (1636) if the Principall is drawn with the Trumpet, the irregularities are covered up. Probably owing to the peculiar design of the windchest, and the resultant robbing, the Trumpet goes out of tune if drawn with full organ, and is best reserved for solo passages.

The Diapason represents fairly normal 17th-century practice. The mouths are a narrow $\frac{1}{4}$ in. width, and cut up very low. Its scaling is carried on throughout the Chorus except that the Principal is somewhat different and may well be older.

The scaling at each C of Vox Humana, Trumpet, and Diapason, is as follows (inches):

VOX HUMANA (REGAL)	CC	TC	C	C^2	C^3
Length of Resonator	$10\frac{3}{4}$	$8\frac{1}{4}$	6	$4\frac{7}{8}$	flue
Diameter	$1\frac{3}{8}$	$1\frac{1}{4}$	$1\frac{1}{8}$	$1\frac{1}{8}$	,,
Tongue, speaking length	$2\frac{3}{8}$	$1\frac{3}{8}$	$1\frac{1}{8}$	1	,,
TRUMPET					
Scale	5	3	$2\frac{3}{8}$	2	$1\frac{3}{4}$
Tongue, speaking length	?	$1\frac{5}{8}$	$1\frac{3}{16}$	$\frac{5}{8}$	$\frac{5}{16}$
Thickness	.015	.012	.010	.008	.005
DIAPASON					
Scale	5	$2\frac{3}{8}$	$1\frac{7}{8}$	$1\frac{1}{4}$	$\frac{3}{4}$
(Normal Mander scale, for comparison)	5	3	$1\frac{3}{4}$	$1\frac{1}{2}$	$1\frac{1}{8}$

The Choir organ is disappointingly small. The complicated manoeuvring whereby the stopped diapason is available on either Great or Choir has already been mentioned. It in fact sounds rather different on each, presumably owing to differences in the wind supply. On the Great it is most beautiful, with a fairly strong 'chiff' in the attack and quite a prominent twelfth in its tonal make up. On the Choir, more robbing is in evidence and one or two notes sound quite off pitch, which is most tiresome.

The 4 ft. stopped wooden flute, a typical 'Nason flute', is similar in tone, but these two together form only a very mild secondary chorus to stand up against the Great in the typical 17th-century 'Double Organ' voluntary. In fact they will not stand up against more than the 8, 4 and 2 ft. diapasons on the Great. All the same, Double Organ Voluntaries can be played on this instrument, which is more than can be said of any other contemporary British organ, except for Compton Winyates, if this was in good working order.

The Bassoon is rather a mystery. It has every appearance of being original and is, for practical purposes, a small trumpet. However, there is no recorded instance of Smith ever having made such a stop although Renatus Harris, curiously enough, did (e.g. Salisbury). It is the least useful and satisfactory stop in the organ. A fifteenth would have been of far greater utility.

This organ is unquestionably of unique historic and artistic importance. Its successful restoration, with the introduction of so little new material, reflects the greatest credit upon Noel Mander.

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Diameter	$1\frac{3}{8}$	$1\frac{1}{4}$	$1\frac{1}{8}$	$1\frac{1}{8}$	,,
Tongue, speaking length	$2\frac{3}{8}$	$1\frac{3}{8}$	$1\frac{1}{8}$	1	,,
TRUMPET					
Scale	5	3	$2\frac{3}{8}$	2	$1\frac{3}{4}$
Tongue, speaking length	?	$1\frac{5}{8}$	$1\frac{3}{16}$	$\frac{5}{8}$	$\frac{5}{16}$
Thickness	.015	.012	.010	.008	.005
DIAPASON					
Scale	5	$2\frac{3}{8}$	$1\frac{7}{8}$	$1\frac{1}{4}$	$\frac{3}{4}$
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This organ is unquestionably of unique historic and artistic importance. Its successful restoration, with the introduction of so little new material, reflects the greatest credit upon Noel Mander.

ERIC HALFPENNY

Two Rare Transverse Flutes

THE instruments here described are each unique in a different way, and for that reason alone are worth placing on record. The first was kindly brought to my attention some years ago by Mr L. H. Lock of this Society, and is now in my possession. The second has been in the Victoria and Albert Museum, London, since 1898, and apart from having been listed by Francis Baines when he catalogued the instruments there in 1935, has remained unnoticed since. It is illustrated and described here by kind permission of the Director of the Museum.

BASS FLUTE

This instrument (Pl. VII, a) is a typical specimen of the so-called cylindrical *Querflöte* figured by Praetorius, and so far as I know it is the only one of its kind outside the greater Continental collections. Although such instruments are usually of one-piece construction, the present example, like that in the Praetorius drawing, is jointed between the head and the body. The socket at the top of the body was originally strengthened externally by having turned upon it nine raised and rounded rings; but a very old split in this region has been repaired by levelling off four of these and slipping on a brass ring which covers roughly the upper half of the socket cavity. The tenon on the head was originally a sliding fit, wood on wood, and even now can be kept tight with a few open turns of fine thread. It is calibrated with nine inscribed lathe-marks, equally spaced at approximately 4.5 mm. This distance is much too large for these marks to be considered the usual 'bed' to start a thread lapping. It seems more likely that they serve as a guide for 'pulling out' when tuning, like the calibrations on late eighteenth-century flute heads. We have therefore a very early instance of the wooden tuning slide, hitherto attributed to Quantz. Pulled out to the practicable limit, to the fifth line (about 27 mm.), the pitch is lowered by about a semitone, and the intonation of the instrument does not appear to suffer when this is done.

The head has the usual open top above the plug, familiar to everyone from the *étui* of flutes in the foreground of Holbein's celebrated painting

of *The Ambassadors*. The exact significance of this considerable extension of the tube above the plug has never been explained. It is not all needed for adjustment of the plug, since the position of the mouth hole is nearly halfway along the head. Moreover, in this specimen at least, the plug is wooden, and a fixture; in fact, it is my provisional opinion, based upon close examination but nevertheless left open to correction, that this plug is solid with the head, the bore being carried down to it from either end. Improbable though this sounds, it is recorded here because we know so little about the thought and intention behind early instrument technology, and it may well be that the movable corks found on comparable instruments in museums are not the original arrangement. Among other interesting features of the head, one is the tiny mouth hole—which would be small by eighteenth-century standards for the ordinary treble flute—set with its major axis *across* the instrument so that it favours the oblique playing position which is so often depicted and which enables the lower finger holes to be reached more easily. Another is the slight swelling or thickening of the head about the mouth hole where moisture is most likely to collect.

Careful measurement of the body has shown that not only the bore, but also the wall thickness tapers very slightly towards the lower end, the internal and external contractions of diameter being no more than 1.0 mm. and 3.5 mm. respectively over a distance of 61.4 cm. (about 2 ft.). The external taper may clearly be seen by eye alone. The note-holes are very carefully cut and undercut.

On the head, above the mouth hole, and again on the body between the fingerhole groups, is a crudely branded or incised stamp consisting of a shield displaying a six-point star. On the head only, above the shield, is a cartouche containing some lettering which is only half legible. The material of the instrument is boxwood, and any suggestion that flutes of this type are crudely or roughly constructed are here at once refuted. With a bore averaging about one inch and with walls less than $\frac{1}{4}$ in., the two-foot body has been perfectly turned and bored, the cutting tool taking in its stride one or two knots in the chosen billet of wood which actually penetrate the finished walls. Modern equipment could certainly have done no better with the same material. The tone too is most striking, particularly in the lower octave, full and soft, yet with a surprisingly telling quality, quite unlike that of a contemporary bass recorder. With the slide fully closed, the pitch is *g*, about a semitone below the modern norm. No one will expect such an instrument to be 'fully chromatic'. It is a simple—but far from uncouth—diatonic 'bass' for the *petit jeu* of flutes. It responds to the fingerings shown below.

g	123	456	*e'*	1--	---	*c''*	123	---
a	123	45-	*f'*	-2-	---	*d''*	1-3	---
b	123	4--	*g'*	-23	456	*e''*	1-3	45-
c'	123	---	*a'*	123	45-	*f''*	---	45-
d'	12-	---	*b'*	123	4--	*g''*	123	-56

In searching catalogues for comparable examples, I found in the Collection of the Kunsthistorisches Museum, Vienna, an object listed by Schlosser as a 'Bassanello' (No. 218), but which on further examination proved to be the body section of a bass flute slightly smaller but in other ways exactly similar to that just described. It has the same turned socket-rings and the same internal and external taper to the walls. By courtesy of Dr Victor Luithlen, who is delighted to have this object correctly identified, I am able to publish herewith the body dimensions of the two instruments side by side.

Dr Luithlen has also very kindly had the flute rephotographed especially for this article (Plate VII, b). This Vienna flute bears no stamp or mark of any kind. The only similar mark to that on my flute which I know is on a well-known flute in the Instrument Museum of the Brussels Conservatoire, which bears the name C. RAFI (illustrated in R.M.E. catalogue, 1890, Plate I). This is a one-piece cylindrical 'tenor' (i.e. modern treble) instrument, and also bears two incised or stamped shields. These are, however, much smaller than on my flute and contain a griffin, not a star. (For this information I am indebted to Mlle J. Douillez of the Vleeschhuis Museum, Antwerp.) A provisional reading of the inscription on my flute, by Professor Francis Wormald, is IA [=Jacopo] NENI. This name is placed on record here in the hope that it will lead to the disclosure of other examples by this unknown maker.

MEASUREMENTS IN MILLIMETRES

HEAD JOINT (Halfpenny flute):
length: 294, plus tenon, 41; total: 335
internal diameter: 26.5
distance from tenon shoulder to plug: 210
distance from tenon shoulder to centre of mouth hole: 150
distance to upper side of plug from top: 68
thickness of plug: 16
mouth hole; major axis (transverse): 9.4; minor: 8.4
SPEAKING LENGTH, from centre of mouth hole to bottom end: 764

PLATE V *Adlington Hall. The restored Organ and console. (Paper labels have been temporarily stuck onto the stops while the owner is becoming familiar with them.)*

PLATE VI *Adlington Hall. Pipework after dismantling. Top centre: the wind-chest (upside down). Extreme top centre: the keyboards.*

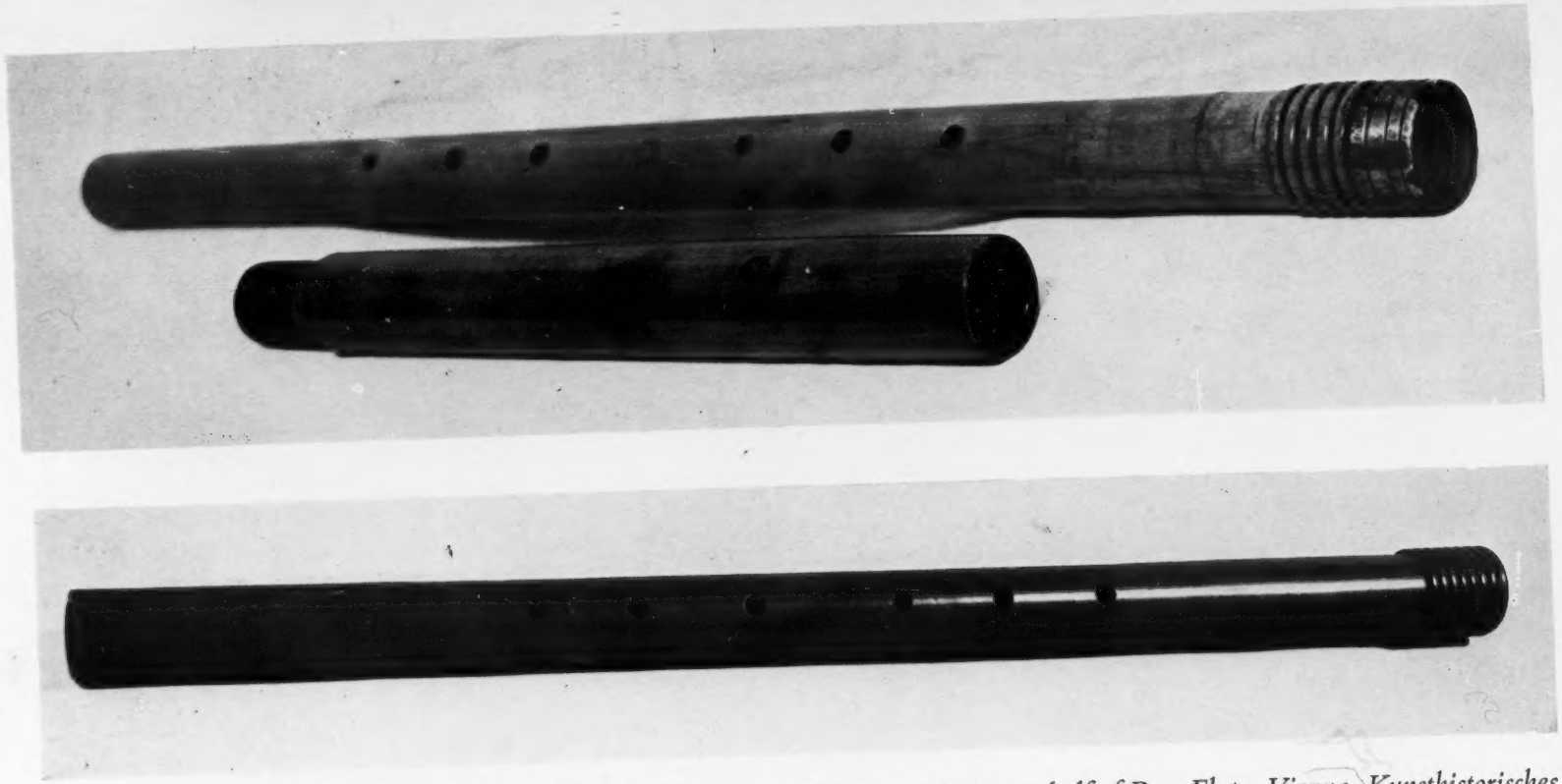

PLATE VII *a.* (ABOVE) *Bass Flute. Eric Halfpenny.* (*See p. 38.*) *b.* (BELOW) *Lower half of Bass Flute, Vienna, Kunsthistorisches Museum, No. 218.* (*Copyright.*)

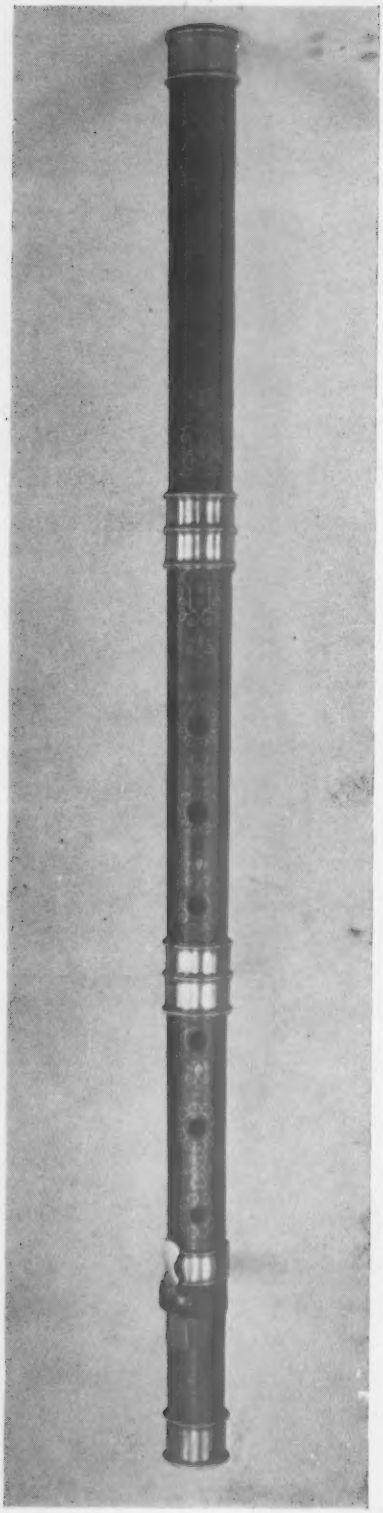

PLATE VIII *Flute by Bressan. London, Victoria and Albert Museum.* (*See p. 41.*) (*Crown Copyright.*)

	Halfpenny	Vienna
BODY:		
length overall	614	581
internal diameter, below socket	26.5	21.5
internal diameter, at bottom end	25.5	21.0
contraction	1.0	0.5
wall thickness below socket	6.4	6.25
wall thickness at bottom end	4.5	5.0
NOTE-HOLES:		
from top of body to hole 1	164	187
1 to 2	37	37
2 to 3	35	35
3 to 4	89	52
4 to 5	35	38
5 to 6	36.5	31
6 to end	169	156.5
DIAMETERS:		
hole 1	8.5	8.5
hole 2	8.1	8.0
hole 3	7.0	7.75
hole 4	8.5	8.0
hole 5	8.5	7.75
hole 6	6.8	6.5

TREBLE FLUTE D'ALLEMAGNE BY P-J BRESSAN

Bressan is known to the majority of connoisseurs today only by his many surviving recorders. But the Talbot manuscript makes it clear (*GSJ* I, pp. 13–15) that, as one would expect, he also made the other types of woodwind. It is not generally known that two Bressan flutes are preserved, one in the Dayton Miller Collection, Library of Congress, and the other, the subject of this note, in the Victoria and Albert Museum, London. Neither is to be found, as such, in any official publication. The Miller instrument is masked in his list of makers since he gives only the number of Bressan specimens and not their types. That in the Victoria and Albert Museum is post-Engel, having been acquired in 1898 for £3 (No. 452). It was listed by Francis Baines a quarter of a century ago in his MS catalogue of this collection—too early to influence the newer Bressan lore which started with the restoration of the Chester recorders and the discovery of the Talbot manuscript. In 1957 I rediscovered it while rearranging the collection, and took the oppor-

tunity of examining and measuring it. The Dayton Miller flute, recently brought to my notice by Mr Lichtenwanger of the Library of Congress, deserves a separate article, for it is of the earlier 'Hotteterre' type, with the recorder-like one-piece body, as described by Talbot.

The present specimen, the one in the Victoria and Albert Museum, shows that Bressan lived long enough to have taken part in the next stage of the instrument's development whereby the body was divided between the two fingerhole groups and provided with up to seven *corps de rechange* or interchangeable upper-middle joints to accommodate the flute to pitches varying as widely as a whole tone—a provision satisfactory with the flute thanks to its adjustable cork and the effect of this upon the internal intonation. The present instrument is by no means conventional judged by slightly later standards and embodies some unusual features. It is of ebony, with flush straight-sided sockets, each of which is fitted with a deep and handsome silver mount (Plate VIII). The whole surface of the tube is inlaid with a fine filligree of silver wire in scroll patterns. The silver key is of the early 'sector' type but is mounted on a cut-away boss. The walls of the tube are exceptionally thin. All tenons, including that on the head, point downwards, as in the flutes of Stanesby Junior. The deep head cap is of silver, and there is a silver tip to the foot which is flanged inwards at the bottom to enclose the edge of the tube. The mouth hole is in the early high position and is almost circular. The foot joint opens out by 1 mm. at the bottom end.

The instrument, which is in perfect order, plays beautifully and has a magnificent tone. It is particularly good on the forked F's, usually the least satisfactory notes on the one-keyed flute. With the only upper joint now available, the pitch is that of the Bressan recorders. The date cannot be much later than 1710–15.

A table of measurements is given below, in millimetres and also (in brackets) with approximate translation into inches for comparison with Talbot's measurements. It will then be seen that the specimen in the Victoria and Albert Museum is somewhat shorter, but this is compensated for by the slightly smaller mouth hole, which would flatten the overall pitch for a given length.

MEASUREMENTS IN MILLIMETRES (INCHES)

HEAD JOINT:

length overall: 214 ($8\frac{3}{16}$)

mouth hole to shoulder of tenon: 134 ($5\frac{1}{4}$)

tenon: 30 ($1\frac{3}{16}$)

bore (cylindrical): 19.2 ($\frac{3}{4}$)

UPPER MIDDLE JOINT:

length: 191 ($7\frac{1}{2}$), plus tenon: 30 ($1\frac{3}{16}$)

bore, lower end: 17 ($\frac{21}{32}$)

LOWER MIDDLE JOINT:

length: 131 ($5\frac{1}{8}$), plus tenon: 16 ($\frac{5}{8}$)

bore, lower end: 15.4 ($\frac{17}{32}$)

FOOT JOINT:

length: 94 ($3\frac{3}{16}$)

bore, lower end: 16.4 ($\frac{5}{8}$)

SPEAKING LENGTH, from centre of mouth hole to bottom end:

554.5 (1 ft. $9\frac{23}{32}$ in.)

HOLES:

	Diameter	Spacing (from edge to edge)	
mouth hole	9.0×9.1 ($\frac{11}{32}$)		
hole 1	6.7 ($\frac{1}{4}$)	to hole 1	228 (9)
hole 2	7.5 ($\frac{9}{32}$)	to hole 2	29 ($1\frac{1}{8}$)
hole 3	6.8 ($\frac{1}{4}$)	to hole 3	32 ($1\frac{1}{4}$)
hole 4	6.7 ($\frac{1}{4}$)	to hole 4	50 ($1\frac{31}{32}$)
hole 5	7.0 ($\frac{9}{32}$)	to hole 5	30 ($1\frac{3}{16}$)
hole 6	6.0 ($\frac{1}{4}$)	to hole 6	31 ($1\frac{3}{16}$)
hole 7	?	to hole 7	45 ($1\frac{3}{4}$)

CHARLES McNETT

The Chirimia: A Latin American Shawm[1]

THE Editor has said (*GSJ* XII) that 'a lively area [of research] to which, however, peculiarly little attention has been given is that of new musical creation in non-Western countries in terms of adopted or modified Western instruments, accompanied or not accompanied by Western musical ways. . . .' This paper is an initial offering in the direction he has suggested.

The *chirimia* is a small, pirouette-bearing, double-reed instrument of the shawm family, much used by the Indians in certain parts of Latin America. The specimen in the writer's collection was secured by Mr Carroll Mace in the market at Guatemala City, Guatemala (Plate IV). It has a total length of 13¾ in., and consists of a wooden tube 10⅝ in. long, into which is inserted, for half an inch, a staple 4⅛ in. long. The staple bears on its upper end a double reed of dried and smoked Bromeliad leaf, which, Dr Lyman B. Smith of the Smithsonian Institute, Washington, D.C., informs the writer, is a species of *Tillandsia*. The instrument's bore is cylindrical, ½ in. in diameter. There are two ornamental rings on the body, one above the note holes, and one between holes 6 and 7. There are six effective note holes, ⅜ in. in diameter, and three ⅜ in. tuning holes, one in the position of a seventh note hole, and the other two on the back of the instrument at the same level as the seventh hole. There are no thumbholes. The sounding length of the instrument is 12 in.[2]

There exist several other descriptions of the instrument. A specimen in the Hamburgisches Museum für Völkerkunde und Vorgeschichte (Plate IV) was collected in 1928 in Totonicapan, Guatemala. This, and one belonging privately to Dr Franz Termer and collected by him in 1927 in Santa Eulalie, Guatemala, have been described by Heinitz.[3] He says of them: 'Bei den von Termer erwähnten Chirimia-Instrumenten im Völkerkunde-museum Hamburg handelt es sich um Doppelrohrblatt-Schalmeien mitsorgfältig gearbeitetem Blatt. Das eine der Instrumente ist ein wenig grösser als das andere; beide sind zylindrisch (!) gebohrt. Das kleinere Instrument hat sieben Griff-löcher und in der Höhe des untersten derselben noch links und rechts ein weiteres seitenständiges; auf dem grösseren Instrument befinden sich nur sechs Haupt-

löcher, die zwei seitenständigen in der Höhe etwa eines siebenten Loches. Die seitenständigen Löcher bei dem grösseren Instrument sind wesentlich kleiner als die bei dem kleineren.' The word *grösser* leads one to expect an alto chirimia at first glance, but a picture of the two instruments shows merely that one is thicker than the other; both have the same length. Furthermore, it is apparent that both have six note holes, the seventh hole on one showing simply a different method of arranging the tuning holes.

Malaret[4] quotes a work by Cortijo, in which another example is described: 'Chirimía. f. Colomb., Ecuad., and Venez. Instrumento músico indio, especie de clarinete de madera con la boquilla formada de dos cañuelas. En dirección de la embocadura tiene cinco agujeros, otro lateral y dos en la parte posterior. Por la situación de estos agujeros el instrumento puede combinar dos tetracordios cromáticos. Sus sonidos son ásperos y a veces estridentes.' Of course, although it does have a cylindrical bore, it is not an '*especie de clarinete*' because of the double reed. It may or may not here have six fingerholes, since no level is specified for those '*lateral*' and '*posterior*'.

In the Metropolitan Museum of Art, Crosby Brown Collection,[5] there is an example of a chirimia (No. 1457). The entry in Morris's catalogue of the Collection says: 'Reed pipe. *Chirimia.* A conical tube of hard wood with 6 fingerholes and four additional holes for altering the pitch. Chibcha Indians.' (The Chibcha Indians inhabit the area around the Magdalena and Sierra Nevada de Merida Rivers in Colombia.) Presumably the word 'conical' refers to the profile of the tube, and not to the bore. If it does have a conical bore, it is the only such specimen that I have been able to locate. Furthermore, the 'four additional holes for altering the pitch' would, I feel sure, turn out to be tuning holes, but one cannot be positive on this point.

Morris refers to a chirimia in the Brussels Conservatoire Museum, No. 830. Mahillon (ii, 142) describes this as 40 cm. long including reed and as giving a G major scale from *g'* to f''♯; another, No. 831, measures 45 cm. and is a minor third lower in pitch.

Marti[6] illustrates a chirimia in his book on Pre-Columbian instruments in Mexico. Unfortunately the staple is missing. The instrument is very well made, with six fingerholes. No tuning holes are visible in his photograph. Bogert[7] shows a chirimia player from Jala, Mexico. The player's instrument appears to be somewhat shorter than that of the writer, and has a bigger bell.

Carroll Mace reports the following method of construction used by Esteban Xolop, of Rabinal, Guatemala, the information being here supplemented by an examination of the writer's specimen.

The tube is hand-carved from a length of reddish hardwood, apparently mahogany. Some of the instruments illustrated in the literature may be lathe-turned, especially the one shown by Marti. The bore is then burned and scraped through with a hot iron. This method of manufacture probably accounts for the use of a cylindrical bore. The writer's specimen, however, had been bored with a brace and bit. Mr Mace suggested the use of a brace and bit to Sr Xolop, who was very interested in the idea, since many blanks are broken in the hot-iron boring process. Fingerholes are also burned through, and then enlarged with a knife in tuning. This had been done in the writer's specimen, and also, it is reported, in the Hamburg specimens. The one shown by Marti appears to have drilled fingerholes.

The staple is bent out of a piece of a tin can and is lapped at the lower end with string to fit into the bore, the string being waxed to hold it in place. Wax is also used to seal the seam in the staple. The pirouette is made by cutting an empty thread-spool crosswise, and placing it over the top of the staple, leaving $\frac{1}{2}$ in. of the staple projecting on which to bind the reed. The staple is wound with string under the pirouette to make a friction fit.

The reed is made, as was noted above, of a Bromeliad leaf, which dries fairly thin (less than $\frac{1}{16}$ in.) and with uniform thickness. When dry, it is quite stiff and brittle, and must be soaked for some time to soften it enough to play without splitting; the reed on the writer's specimen had been damaged by being blown when dry. Bogert[8] says of the reed making, 'The mouthpiece is made by wrapping thread around two strips of palm leaf, with their projecting ends trimmed with scissors after they have been attached to a small tube.' For experiment with the instrument, a replacement reed was constructed of thin plastic of the type used to enclose photographs in a wallet, using the original dimensions. It was found that the upper corners of the reed bore so heavily together that they had to be trimmed in order to free them enough to allow them to vibrate. This reed produced a clear *c'*, as one would expect of a cylindrical bore 12 in. long. Three attempts at producing a series of tones, using this reed for the first two, and another like it for the third, were not so successful, producing many semitones in different parts of the compass. One thing is quite certain, however. The chirimia definitely overblows at the octave—which is not what one would expect of a cylindrically-bored tube twelve inches long and producing *c'* as its bottom note. This acoustical paradox may be due to the conicity of the staple, which forms nearly one-third of the sounding length. The question of tonal series is further confused when one considers the transcriptions of recordings made in Guatemala

given by Heinitz.[9] These show the tones used by the Mam Indians of that part of Guatemala are: *c′ d′ f′ g′ a′ b′♭ c″ d″ f″*. It will be noted that *e′ e″* and *b′* never occur, and that the numerous semitones given on trial by the instrument from Guatemala City never appear. Clearly there is need of further on-the-spot investigation here. Bogert[10] has recorded four selections by a chirimia player from Jala, Mexico. They represent four distinct types of songs, and clearly demonstrate the acculturation that has taken place in the native Indian music. The selections are: a modern Mexican *corrido*; a tune based on local bird calls; a local adaptation of an old Indian tune; and a local adaptation of an ancient tune which Bogert feels may be Galician in origin. The tone of the instrument, to judge by these recordings, resembles the modern Mexican trumpet style, but is obviously of double-reed origin. In its fiery strength it must sound very much as the shawms of the Conquistadors did.

The chirimia, it would appear, is restricted to the area formerly occupied by the high cultures of Latin America. Like them, it occurs on a line drawn from the Valley of Mexico south to the Highlands of Peru, with a gap in the vicinity of Panama.

In the town of Quiroga, in the state of Michoacan, Mexico, the chirimia[11] is used with a drum, especially for the series of fiestas on May 1, 2, and 3. It has much currency in Michoacan, and is also found at Cheran[12] where it is used during the fiesta of San Francisco, the patron saint. The ranchería of Cosumo provides the band, which consists of four or five chirimias played in unison, and a drum. Although it was a religious occasion, the band's favourite (and perhaps only) piece was the 'Beer Barrel Polka'.

Sr Enrique Castro y Ochoa informs the writer that the chirimia is used in Morelia. In Mitla, Oaxaca, Parsons[13] reports the chirimia under the name *flauta*, which is also applied to the true-flute. Either or both are played in a band with a drummer and occasionally a bugle. *Chirimía* is here a term reserved for the musical instruments collectively. Parsons[14] also reports chirimias from Tepoztlan in the state of Mexico. Bogert, as noted above, notes that the chirimia is used in Jala, Nayarit, usually accompanied by a snare drum, and Mr Mace has seen chirimias used in religious processions in Rabinal, Guatemala.

The chirimia band in Santa Eulalie consisted of two instruments and a drummer.[15] La Farge[16] says that these bands perform at the fiestas of the religiously oriented *cofradías*.

In Todos Santos, Guatemala, the chirimia player is a church official;[17] but it may well be that this chirimia is in fact a true flute, since the

author constantly refers to it as such. Much confusion reigns among anthropologists as to what a flute is, the tendency being to call any small wind instrument a flute, and the Indians, as we have seen above, add to it. Thus it is quite possible that the 'flutes' alluded to by Steward[18] among the Moguex and Paez of the South Colombian Highlands are in fact chirimias. The article states, 'A kind of orchestra, known as a "chirimia", today consists of a large drum to beat time, a small drum to play a rhythmic roll, and flutes to carry the tune.' We know, at least, that chirimias do occur in the area, since Malaret and Morris, mentioned above, both describe them for Colombia. Turning to the Andean Highlands further south, we have only scattered evidence. Srta Eneida Avila tells the writer that she has heard the instrument used in the Highlands of Peru. Izikowitz says,[19] 'The oboe is not an Indian instrument. It has only recently come into use in Peru.' He adds that it is called a *chirisuya* there.[20]

That the chirimia usually has a religious association—though its use may also be secular—arises from historical factors. It cannot be doubted that the chirimia is of European origin, if for no other reason than that the Indians of the New World did not know the double reed. Izikowitz is definite in assigning European origin to it, and so is Marti.[21] In form it is a shawm, with some later developments in construction. Thus it keeps only five or six fingerholes, the rest having become synonymous with the tuning holes lower on the bell of the shawm. The rudimentary keywork of the shawm has been lost entirely. The bore has become cylindrical rather than conical as on the shawm, undoubtedly through greater ease of construction. Finally, the hole in the face of the pirouette has disappeared. However, as Bate has noted,[22] the pirouette is diagnostic of the shawm, although there have been changes in the form of the chirimia since its introduction to the New World.

Saldivar[23] notes that the first band of Cortes had only trumpets, but points out that the chirimia was interchangeable with the trumpet, depending on what was available. Therefore it is quite possible that by the end of his campaign in 1521 the Indians had already heard a chirimia. If not, they soon would. For one of the priests with Cortes, Fray Pedro de Gante, was to found a school in Texcoco, Mexico. Among many other items in the curriculum was a course in music, both singing and playing. Of this, Torquemada says,[24] 'Los primeros Instrumentos de Musica, que hicieron, y usaron, fueron Flautas: luego, Chirimias. . . .' The addition of chirimia making and playing must have occurred by 1524, because at that time Fray Pedro de Gante went to Mexico City from Texcoco.[25] He had recognized in the Indian liking for music a

powerful ally in their conversion to the Catholic faith, and took full advantage of it. Fray Bartolomé de las Casas, in Guatemala, met with the same situation, and in his turn adopted music as an ally. He said,[26] 'Y habiendo de proseguir con su conversación adelante, no era bien dejar el medio que le dió tan buen principio, que era el mismo canto y música.' While there is no direct evidence, one can assume that the same thing occurred in Peru. This method of conversion found such favour that a royal *cédula* was issued on October 17, 1540, applying the same policy to Guatemala. It states in part,[27] 'Por ende yo vos encargo y mando que de los indios cantores y que supieren tañer minstriles e chirimías y sacabuches y flautas que hubiere en los Monasterios de vuestra Orden de esa Provinicia deis a los dichos Fray Bartolemé de las Casas . . . para que vayan con ellos a entender en la dicha pacificacion. . . .' Undoubtedly, the missionaries who went to Peru also knew the use of music in conversion. Indian enthusiasm for Spanish musical ways occasionally got out of hand; Saldivar[28] relates several instances, beginning in 1555, when orders were issued restricting the use of the new instruments, especially in the churches.

It would seem three factors influenced the unusually rapid acceptance of the chirimia and other things musical of the Spaniards by the high cultures of Latin America, and by them alone.

One was the high cultures' love of music and their development of an advanced musical system. Consequently, they were not only interested in the Spaniards' music and musical instruments, but they had the ability to adopt them for their own use. Marti[29] says: 'Señalemos que la tradición musical aborigen tiene una vitalidad que le permite asimilar melodías, ritmos e instrumentos exóticos. A esta vitalidad se debe la aparente paradoja de versiones indígenas de melodías y formas extranjeras. Las formas y melodías son extrañas pero su carácter e interpretación son autóctonas. . . . El mismo fenómeno se observa en los instrumentos. Los laudes, guitarras, violines y oboes o chirimías chamulas, otomíes, huicholes, coras, tarahumaras o lacandones son casi idénticos a sus prototipos europeos del siglo XVI. . . .'

Secondly, the Spanish realized this fact and made use of it to help convert the Indian.

Thirdly, the Spaniards themselves tended to settle in the more temperate and mountainous regions of the continents—the areas inhabited by the high cultures. They therefore had the most contact with and influence on these areas. Izikowitz[30] has pointed out, 'The influence from outside has not by any means been overwhelming, except among Indians who have been absorbed by European civilization.'

NOTES

[1] This paper is in part an outgrowth of the Latin American Studies Seminar conducted by Dr William J. Griffith of Tulane University, New Orleans, La.

[2] Complete dimensions are:

Total length $13\frac{3}{4}''$; Tube, inside diam. $\frac{1}{2}''$, outside diam. at top $\frac{15}{16}''$, at bottom $1\frac{1}{8}''$; Staple, diam. at top (slightly flattened) $\frac{3}{16}''$, at bottom (ovoid) $\frac{5}{16}'' \times \frac{7}{16}''$, length $4\frac{1}{8}''$; Pirouette, diam. $1\frac{5}{16}''$, distance from top of staple $\frac{1}{2}''$; Reed, length $1\frac{1}{8}''$, width at top $\frac{15}{16}''$, at bottom $\frac{9}{16}''$; Holes (distance from top of staple to centre), 1–$5\frac{3}{4}''$, 2–$6\frac{7}{8}''$, 3–$7\frac{3}{4}''$, 4–$8\frac{3}{4}''$, 5–$9\frac{7}{8}''$, 6–$10\frac{7}{8}''$, 7L–12″, 7R–12″, 7 centre–12″; Diam. of all holes, $\frac{3}{8}''$.

[3] Heinitz, W., 'Chirimía- und Tambór-Phonogramme aus Nordwest-Guatemala', *Vox*, V. 19, Nos. 1–2, Hamburg, 1933, p. 4.

[4] Malaret, A., *Diccionario de Americanismos*, Imprenta 'Venezuela', San Juan, P.R., 1931, p. 196.

[5] Morris, F., *Metropolitan Museum of Art: Catalogue of the Musical Instruments of Oceania and America*, New York, 1914, p. 225.

[6] Marti, S., *Instrumentos Musicales Precortesianos*, Institutio Nacional de Antropología, Mexico, D.F., 1955, p. 210.

[7] Bogert, C. M., and M. R., *Tarascan and Other Music of Mexico: Songs and Dances of the Mexican Plateau*, Notes to Folkways Records Album No. FW8867, New York, 1958.

[8] *Ibid.*

[9] Heinitz, 1933, pp. 6–12.

[10] Bogert, 1958.

[11] Brand, D., Quiroga, 'A Mexican Municipio', *Smithsonian Institution Institute of Social Anthropology*, Publication 11, Washington, D.C., 1951, p. 204.

[12] Beals, R., 'Cheran, a Sierra Tarascan Village', *Smithsonian Institution Institute of Social Anthropology*, Publication 2, Washington, D.C., 1946, pp. 122–4.

[13] Parsons, E., *Mitla: Town of Souls*, University of Chicago Press, 1936, p. 191.

[14] Parsons, 1936, p. 131.

[15] Heinitz, 1933, p. 4.

[16] La Farge, O., *Santa Eulalie*, University of Chicago Press, 1947, p. 88.

[17] Oakes, M., *Two Crosses of Todos Santos*, Pantheon Press, New York, 1951, p. 55.

[18] Steward, J., 'Handbook of South American Indians', *Smithsonian Institution, Bureau of American Ethnology*, Bulletin 143, V. 2, p. 951.

[19] Izikowitz, K., *Musical and Other Sound Instruments of the South American Indians*, Goteborg, 1935, p. 265.

[20] The name *chirisuya* appears to be a pun, since *mía* and *suya* are both forms of the Spanish possessive, translating respectively *mine* and *yours*. Perhaps an Indian, knowing little Spanish, made a mistake.

[21] Marti, 1955, p. 150.

[22] Bate, P., *The Oboe*, London and New York, 1956, p. 31.

[23] Saldivar, G., *Historia de la Música en México*, Publicaciones del Departamento de Bellas Artes, Mexico, D.F., 1934, p. 181.

[24] Torquemada, J., *Monarquía Indiana*, V. III, Mexico, D.F., 1944, p. 214.
[25] Noll, A., *A Short History of Mexico*, Chicago, 1890, p. 87.
[26] Remesal, Fray A. de, *Historia General* . . . , Biblioteca 'Goathemala', Guatemala City, V. 4, 1932, p. 229.
[27] *Ibid.*
[28] Saldivar, 1934, p. 183 *et seq.*
[29] Marti, 1955, p. 150.
[30] Izikowitz, 1935, p. 415.

PIERRE J. HARDOUIN

Harpsichord Making in Paris: Eighteenth Century*

7. HEMSCH—MOERS FAMILY

Born at Castenholz near Cologne, the brothers Henri and Guillaume Hemsch came to Paris about 1720. The elder was soon admitted into the guild as master and though a foreigner was elected to the jury of the guild (1746).[1] Soon he was to admit his younger brother as master (1748) and then obtained his own naturalization.[2] Henceforth Guillaume worked on his own account and was elected to the jury in his turn (1760), the year after his marriage to Marie Anne Offenheizer, daughter of a former Austrian officer.[3] Henri then relied on his nephew Jean Henri Moers who was born at Castenholz and naturalized in 1760.[4] He became a master as early as 1762.[5] Hemsch and Moers lived in the Rue Quincampoix. In 1767 the ageing Henri Hemsch made his will:[6] a bachelor, he left a competence to his brother and a gift to the son of the latter, but the bulk of the estate went to Moers who had been 'at the head of my workshop for more than fifteen years', and who was to care for Moers's sister Gertrude, the mistress of their house. Only a diamond worth 250 *livres* was detached from the estate to provide for the friend who served as executor. Even so, an inventory of the chattels was drawn up, both for the *fisc* and because the uncle, Guillaume, was insistently claiming 4,484 *l.* as salary for the time during which he had worked for his elder brother before his 'twelve years absence'.

XVII[7]

At the request of Guillaume Hemsch facteur de clavecins rue Quincampoix, psse St Nicolas des Champs ..... Sr Jean Henry Moers aussi facteur de clavecins à Paris (same address). Expert: Sr Benoist Stelle Me Luthier . . . rue des Cordelliers

Item	un clavecin de la facon dud. deffunt	300 *l.*
Item	quatre autres clavecins a grand ravalement faits aussi par led deffunt	1200 *l.*
Item	un clavecin fait par Goujon[8] et qui a pour titre Hans Ruckers	350 *l.*

* Continued from *GSJ* XII.

Item	un clavecin de Joanes Ruckers	450 *l.*
Item	un clavecin de Ruckers	500 *l.*
Item	un clavecin de Roze[9]	120 *l.*
Item	un petit clavecin delabré	18 *l.*
Item	une epinette peint en noir	24 *l.*
Item	une epinette de Bois de Noyers a Ravallement	10 *l.*
Item	deux autres epinettes aussy a Ravallement	108 *l.*
Item	une Epinette a l'octave	30 *l.*
Item	une epinette de Bois de Noyers a Ravallement	50 *l.*
Item	un cimballon à deux claviers non finis	20 *l.*
Item	un autre petit simballon de noyer aussy non fait	19 *l.*
Item	cinq petits instruments comme epinette et manicordion le tous delabré	19 *l.*
Item	quatorze corps de clavecin monté sans etre fini et leurs dependances preparé	120 *l.*
Item	deux vieux pieds vieux couvercles et de bout de bois ne meritant description	12 *l.*
Item	trois etablis avec leurs affutages	10 *l.*
Item	cinquante trois vices de bois tant grandes que petites	20 *l.*
Item	environ cent outils comme scy à mains scy à tournerfermoirs cizeau, lime rappes à bois tarreaux et autres outils	30 *l.*
Item	cinquante six planches de six pieds de bois de peuple	22 *l.*
Item	treize planches courbées de meme bois	6 *l.*
Item	quarante huit planches de bois de tilleul de six pieds	20 *l.*
Item	deux planches de bois de chene de six pieds	40 *l.*
Item	six planches de bois de saulne	5 *l.*
Item	vingt huit paquets de vingt quatre ou vingt cinq au paquet de bois de sapin pour des tables de clavecins	224 *l.*
Item	trois planches de Bois de noyer	5 *l.*
Item	trois membrures de Bois d'hetre	2 *l.*
Item	environ deux livres de cordes de clavecin sur des bobines environ sept cent chevilles de clav et environ un demi douzaine de clef à clavecin et trois tuyaux	19 *l.*

Numerous clients (organists, musicians, and instrument makers) were in debt to the firm and several harpsichords were rented out in the city. Now head of the firm, Moers was elected to the jury of the guild in 1770.

8. HERMÈS

Jean Liborius Hermès, a relative of Goermans the elder[10] and his successor, was born in Paderborn (Westphalia). He soon separated from his wife and from the beginning of the Revolution set up house-keeping with Emilie Marguerite DeVie who was to give him two children,

Pierre Joseph Henri (*An* II) and Louis Julien (*An* VIII). Hermès was among the first to profit by the new divorce legislation but the financial ramifications of his divorce were settled only by a judgement on appeal of the court at Versailles in the year VII. After the second birth he recognized his two sons but he regularized his union only on the eve of death, August 5, 1813. During the last years of the old regime Hermès had prospered. He had bought a house at St-Germain-Laval. However, without being positively ruined by the upheaval he ceased enriching himself, and the inventory drawn up December 13, 1813, a little after his death, well reveals the slowing down of his professional activity. Harpsichords no longer made up the bulk of the instruments. It was now a question of harps and pianos. In the end his widow found herself in such reduced circumstances that she omitted paying the notary.

XVIII[11]

Instruments, outils et ustenciles a l'usage de facteur de harpes et de pianos . . . (*expert*) . . . Jean Adam Camis, facteur de Harpes, Rue St-Denis 357.

une vieille harpe d'occasion, peinte en noir avec ornements dores 50 *f.*

une autre vieille harpe d'occasion et incomplette à recours avec très peu de dorure, la porte à jour 40 *f.*

une harpe toute unie à recours en mauvais état 35 *f.*

une harpe très ancienne d'occasion en très mauvais état 30 *f.*

une harpe en très mauvaise état à recours 25 *f.*

deux caisses de pianos commencés dont un sans couvercle 40 *f.*

une guittare d'occasion, 4 *f.*; 2 violons, 3 *f.*; 6 harpes en blanc sans mécaniques, non achevés, 108 *f.*

17 morceaux de bois de travail de differentes longeurs et largeurs 17 *f.*

9 feuilles ou voliges 4 *f.*, un lot de debris . . . , un lot de vieux outils en très mauvais état, 6 scies, . . . de vieux rabots à l'ancien usage, partie en très mauvais état, un lot de viels limes, rapes, ciseaux, gouches; 11 presses en fer et un étau à main, 4 *f.*

Thus we have sketched the biographies of nearly all the Parisian harpsichord makers of the second half of the eighteenth century. (One should add Dedeban, Swann and Marius.) The most obvious fact to be observed is the elimination of makers of local origin by Rhenish immigrants, doubtless trained in Paris.[12] (The Blanchets were the last French makers and even they were not of Parisian origin. The Henocqs were Norman and rather violin makers.) The most important of them, the heir of the firm of Blanchet, Pascal Taskin, died February 9, 1793. We

cannot do better than to give the inventory made after his death and now newly discovered (Text XIX). The number of fortepianos included in it makes sensible how the harpsichord was then going out of fashion. Pascal Taskin had been living with a certain Demoiselle Despau, not having wished to remarry in order to safeguard the rights of his Blanchet stepchildren, particularly Armand Louis, who had become his chief assistant. Already in January 1793 he had confirmed him in the Blanchet share in the enterprise by a public acknowledgement, and by twelve years wages liberally calculated to pay for his collaboration. Better still, a little later he disinherited Demoiselle Despau and his nephews (nevertheless three came from Theux to work with him) and made Blanchet his sole heir.[13] This document was not put into execution without opposition, and only in September was a friendly agreement reached which left everything to Blanchet with the exception of the women's clothing and the possessions existing in the vicinity of Liège.[14] In the inventory we shall note the 'marchandises et outils' and among the furnishings only a 'violon d'orchestre', portraits of the Blanchet parents, of Taskin, and of his stepdaughter Julie, and two busts of Taskin. The merchandise and tools were examined and listed by Moers, called by Blanchet, and Jacques Joachim Swanen[15] for the nephews. The German accent of these harpsichord makers often made difficulties for the notary's clerk in spelling, some words having been left out perhaps for this reason, while others are unrecognizable.

XIX[16]

Dans la boutique au 5e étage sur rue:
4 établis, 24 *l.*; six verloppes, 10 *l.*; douze demi verloppe ou petits rabots, 3 *l.*; 46 pieces tant que petits beauvais, mouchettes et auttres, 6 *l.*; une verloppe de fer, une barre de fer et deux rabots ausi de fer, 15 *l.*; 17 pièces montés d'un vert en marqueterie (?) 8 *l.*; 30 pieces tant cizeaux, fermoirs, gouges et Bidannes, 3 *l.*; 30 pieces tant limes que rapes de fer, plusieurs planches garnies de vrilles et mèches de differentes grosseurs ne méritant pas plus ample désignation, 3 *l.*; 18 pieces tant tenailles, étaux et pinces à couper de fer et cuivre, 9 *l.*; 58 presses en fer différentes grandeurs, 58 *l.*; 12 valets et fer, 12 *l.*; 2 petits étaux de fer, 4 *l.*; 6 sergents en fer de différentes grandeurs, 4 *l.*; 3 pots à col avec leur . . . en cuivre jeaune et rouge, 9 *l.*; 4 vil-Borquin, 16 pieces, petits rabots et guilleaumes, 4 *l.*; 1 trespan de fer et fillière de fer, 1 petite enclume, 4 *l.*; 1 meule de grais montée sur son affut avec sa manivelle, 2 valets de bois, 5 marteaux de fer, 3 triangles, 5 *l.*; 28 presses à vicer à mains en bois, 6 *l.*; 21 pieces de presses en bois de differents genres, 2 *l.*; 2 bottes de fil de fer, 6 *l.*; différents petits rouleaux de fil de cuivre et un paquet de Baillette aussi en cuivre jeaune, 5 *l.*; 1 fareau avec ses mures (?) et différentes petites . . . , 7 roulettes en cuivre, 3 petites . . . , 6 *l.*

1 tirroir dans lequel 5 emporte piece, differentes petites serrures et charnieres, 15 pinneaux de clavier en bois de tilleul don 3 plaqués en ebenne, 15 *l.*; 45 mouvements de clavier, 3 *l.*; 1 petit mortier de fonte, 1 tas de vieilles ferailles, 3 *l.*

à l'égard d'un clavecin à grand ravallement portant le nom de Rukers, envoychez ledit feu Paschal Taskin par la citoyenne Dourlan de Lille pour le raccomé moder ainsi qu'il en a la connaissance des parties qu'il clavier par Lerman avec son pied chassis et pupitre, 72 *l.*; 1 piano de Boulebart en bois d'acajou avec 4 pieds à vice, 144 *l.*; 1 soufflet (*etc.*).

dans une autre chambre:

2 établis avec leurs afutages complets et chacun son valet, 15 *l.*; 66 pieces d'outils (*etc.*).

20 boites de cordes de clavecin . . . 350 bobines de cordes de clavecin . . . 8 courbés, 7 planches . . . voliges de pommier sauvage. . . .

1 carcasse déjetée de clavecin sans dépendances avec 1 vieille épinette, 3 *l.*; 3 carcasses de piano sans couvercles, 18 *l.*; 3 pianos de Gille de Broule en bois d'acajou avec les couvercles et pied, 144 *l.*

800 sautereaux de clavecin de plusieurs bois de clanquettes, 12 *l.*; plusieurs mécaniques de clavecin, pot à colle avec sa marmitte en cuivre rouge, 1 couvercle de piano, 1 gres à afuter, 4 *l.*

dans une chambre au 2e etage:

1 piano, 144 *l.*; id. 144 *l.*; id. 200 *l.*; 2 pianos, 300 *l.*; 1 clavecin de Dumont, 48 *l.*; 2 clavecins non finis, 200 *l.*; 1 petit orge en table, 24 *l.*

dans un salon:

1 piano, 200 *l.*; 1 piano sans nom, 240 *l.*; 2 pianos, 190 *l.*; 1 piano façon Paschal Taskin, 1 clavecin, 300 *l.*; 1 pareille piano même façon, 200 *l.*; 1 clavecin à 3 registres et 1 clavier, 120 *l.*; 1 clavecin de Richard, 120 *l.*; 1 clavecin d'Hans Rukers fabriqué par Paschal Taskin, à 4 registres et mouvement à mécanique, 600 *l.*

dans une autre chambre:

2 vieux clavecins, 72 *l.*; 2 autres clavecins dont un de François Blanchet, l'autre Raron, 144 *l.*; 1 clavecin à 4 registres de Jean Laquerre [Ruckers], fait par Paschal Taskin, 600 *l.*; 1 petit clavecin à 3, à 3 urillons [unissons] et 3 registres de Paschal Taskin, 144 *l.*; neuve avec sa table et clavier non fini, 9 *l.*; 1 clavecin faux Rukers, 60 *l.*; 1 carcasse de clavecin faux Rukers, 3 *l.*; 1 clavecin sans nom à 3 registres, 2 claviers, son couvercle et son pied, 24 *l.*

dans une chambre:

1 clavecin portant le nom Rukers, fabriqué par le feu Paschal Taskin, non fini avec son fond et couvercle avec 4 registres, 100 *l.*; 1 autre pareil clavecin peint à neuf avec sa mécanique, 150 *l.*; 1 carcasse d'un pareil clavecin, 36 *l.*; 1 autre pareille carcasse de clavecin, 24 *l.*; 1 clavecin de Rukers avec ses claviers, 100 *l.*; 4 clavecins neuf non finis faits par Paschal Taskin dont 3 ayant leurs claviers avec leurs pieds et couvercles, 200 *l.*; 1 clavecin noir avec son pied de . . . à 2 claviers du nom de Germain, 60 *l.*; 1 mauvais clavecin propre à bruler, 3 *l.*; 1 épinette de Blanchet, 24 *l.*; 6 marteaux, 2 baillets (*etc.*).

dans une autre chambre:

1 établi avec son petit valet, 2 petits tas de fer, 6 *l.*; 50 petits outils servant à la profession, 3 *l.*; 12 pieces tant tenailles que pinces, 5 *l.*; 5 equerres dont un en cuivre, 2 petits valets, 1 niveau en bois, 5 petites presses à main en bois, 2 . . . , 2 marteaux de fer, 1 vuide berquin, 2 petits . . . , montés en bois, 3 pierres, 7 *l.* 11 sabots en pied de biche de cuivre, 4 bobèches, 3 roulettes de bois dont les bouts en cuivre, 1 petit tas de vielles charnieres, 1 de vielles chevilles en fer, 24 rosettes en plomb, 7 *l.*

2 tablettes à 5 petites boites pleines de mauvaises chevilles, . . . 1 serinète, 1 cistre, 1 flutte traversière, 3 *l.*

1 clavecin portant le nom de Jean de Rukers réparé par Paschal Taskin, sur son pied et pupitre à grand ravallement, 200 *l.*

1 clavecin en noir à filet doré sur son pied pupitre et couvercle à grand ravallement, 150 *l.*

1 clavecin de Jean Rukers à fond d'or et son pied doré à ravallement, 150 *l.*; 1 autre clavecin anglais plaqué en bois d'acajou avec en declare, il a été seulement prisé les ouvrages faits jusqu'à ce jour sur ledit clavecin, 60 *l.*

plusieurs petites boites contenant des pointes de cuivre et de fer et de vielles visses, 9 *l.*; 1 boite contenant 5 mécanique de clavecin en fer non complete, 5 *l.*; differentes bandes de Buffles Bazannes et draps, 2 *l.*; 8 boite contenant des . . . de clavier garnis de leurs os, 8 *l.*; 2 boites remplies de palette d'ebenne servant au Clavecin, 3 *l.*; 2 petites pierres douces, 1 soufflet, et 4 Baillets [maillets] de bois avec 3 fers de rabot, 3 *l.*; 2 chandeliers en fer blanc, mouchettes de fer, 1 vergette servant a l'état, 1 *l.*

1 Forte-piano en faveur [façon] de clavecin, non fini, 48 *l.*

Dans une chambre au 5e etage sur cour.

3 forte piano en faveur de clavecin dont un pointé avec leurs couvercles et fond tous trois non finis et préparés claviers, 84 *l.*; 1 caisse de piano, 12 *l.*; 1 forte piano non fini, 73 *l.*; 1 forte piano de chêne d'Angleterre avec ses pieds, 240 *l.*; 1 clavecin avec ses claviers non fini à 4 registres avec ses dépendances et non pointé, 72 *l.*; differents chevalets ou boudins, 2 *l.*

Dans un grenier au dessus:

4 quartiers de bois de Rose de 2 pieds 4 pouces chacun de longueur, 8 *l.*

dans un cabinet:

40 feuillets de bois d'ébenne, 15 *l.*; 1 cimbalon de François Blanchet avec ses pieds, 9 paires de claviers à brûler. . . .

1 établi, 3 *l.*; 1 épinette en noyer à ravallement sur ses 4 pieds ronds, 18 *l.*; une autre epinette sans ravallement et sans pieds, 3 *l.*; 1 forte piano petit non fini et en très mauvais état, 4 *l.*; 1 épinette 2 forte piano en façon de clavecin faits par Paschal Taskin, 800 *l.*; 1 petite épinette par Paschal Taskin, 40 *l.*; 1 forte piano, 200 *l.*; 1 forte piano anglais, 400 *l.*; 2 forte piano dorés 1 de Sehart, 500 *l.*; 2 autres forte piano dont 1 de Boutebard et l'autre de Longuemanne,[17] 450 *l.*; 1 piano organisé fabriqué par Paschal Taskin, 500 *l.*

1 tirroir dans lequel 5 emporte piece, differentes petites serrures et charnieres, 15 pinneaux de clavier en bois de tilleul don 3 plaqués en ebenne, 15 *l.*; 45 mouvements de clavier, 3 *l.*; 1 petit mortier de fonte, 1 tas de vieilles ferailles, 3 *l.*

à l'égard d'un clavecin à grand ravallement portant le nom de Rukers, envoy-chez ledit feu Paschal Taskin par la citoyenne Dourlan de Lille pour le raccomé moder ainsi qu'il en a la connaissance des parties qu'il clavier par Lerman avec son pied chassis et pupitre, 72 *l.*; 1 piano de Boulebart en bois d'acajou avec 4 pieds à vice, 144 *l.*; 1 soufflet (*etc.*).

dans une autre chambre:

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dans une chambre au 2e etage:

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dans un salon:

1 piano, 200 *l.*; 1 piano sans nom, 240 *l.*; 2 pianos, 190 *l.*; 1 piano façon Paschal Taskin, 1 clavecin, 300 *l.*; 1 pareille piano même façon, 200 *l.*; 1 clavecin à 3 registres et 1 clavier, 120 *l.*; 1 clavecin de Richard, 120 *l.*; 1 clavecin d'Hans Rukers fabriqué par Paschal Taskin, à 4 registres et mouvement à mécanique, 600 *l.*

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dans une chambre:

1 clavecin portant le nom Rukers, fabriqué par le feu Paschal Taskin, non fini avec son fond et couvercle avec 4 registres, 100 *l.*; 1 autre pareil clavecin peint à neuf avec sa mécanique, 150 *l.*; 1 carcasse d'un pareil clavecin, 36 *l.*; 1 autre pareille carcasse de clavecin, 24 *l.*; 1 clavecin de Rukers avec ses claviers, 100 *l.*; 4 clavecins neuf non finis faits par Paschal Taskin dont 3 ayant leurs claviers avec leurs pieds et couvercles, 200 *l.*; 1 clavecin noir avec son pied de . . . à 2 claviers du nom de Germain, 60 *l.*; 1 mauvais clavecin propre à bruler, 3 *l.*; 1 épinette de Blanchet, 24 *l.*; 6 marteaux, 2 baillets (*etc.*).

dans une autre chambre:
1 établi avec son petit valet, 2 petits tas de fer, 6 *l.*; 50 petits outils servant à la profession, 3 *l.*; 12 pieces tant tenailles que pinces, 5 *l.*; 5 equerres dont un en cuivre, 2 petits valets, 1 niveau en bois, 5 petites presses à main en bois, 2 . . . , 2 marteaux de fer, 1 vuide berquin, 2 petits . . . , montés en bois, 3 pierres, 7 *l.*
11 sabots en pied de biche de cuivre, 4 bobèches, 3 roulettes de bois dont les bouts en cuivre, 1 petit tas de vielles charnieres, 1 de vielles chevilles en fer, 24 rosettes en plomb, 7 *l.*
2 tablettes à 5 petites boites pleines de mauvaises chevilles, . . . 1 serinète, 1 cistre, 1 flutte traversière, 3 *l.*
1 clavecin portant le nom de Jean de Rukers réparé par Paschal Taskin, sur son pied et pupitre à grand ravallement, 200 *l.*
1 clavecin en noir à filet doré sur son pied pupitre et couvercle à grand ravallement, 150 *l.*
1 clavecin de Jean Rukers à fond d'or et son pied doré à ravallement, 150 *l.*; 1 autre clavecin anglais plaqué en bois d'acajou avec en declare, il a été seulement prisé les ouvrages faits jusqu'à ce jour sur ledit clavecin, 60 *l.*
plusieurs petites boites contenant des pointes de cuivre et de fer et de vielles visses, 9 *l.*; 1 boite contenant 5 mécanique de clavecin en fer non complete, 5 *l.*; differentes bandes de Buffles Bazannes et draps, 2 *l.*; 8 boite contenant des . . . de clavier garnis de leurs os, 8 *l.*; 2 boites remplies de palette d'ebenne servant au Clavecin, 3 *l.*; 2 petites pierres douces, 1 soufflet, et 4 Baillets [maillets] de bois avec 3 fers de rabot, 3 *l.*; 2 chandeliers en fer blanc, mouchettes de fer, 1 vergette servant a l'état, 1 *l.*
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[1] A.N.—Y9326.

[2] A. Seine.—DC 6. 12.

[3] A.N.—Y9328; A. N. Minutier, XLII, 466. 13 & 20 *nov.* 1759.

[4] A. Seine.—DC 6. 15.

[5] A. Seine.—DC 6. 215, 21 *oct.* 1767.

[6] A. N. Minutier, CIX, 693.—28 *sept.* 1769.

[7] CIX, 693, 28 *sept.* 1769.

[8] See D. Boalch, *Makers of the Harpsichord and Clavichord* (London, 1956). Corrette (1753) groups the harpsichords of Goujon with those of Waters and Hemsch which do not require overspun strings in the bass. The harpsichords of Henri Hemsch which we have seen are very similar to those of Blanchet and Taskin (typically 2×8 ft., 1×4 ft. on two manuals, push-coupler, three jacks). In addition to the references given by Boalch there is a reference to Goujon in the inventory drawn up at the death of the second wife of Joachim Gigault in 1783. See also *GSJ* XII, p. 84, note 6.

[9] See Boalch. Corrette groups the harpsichords of this maker among those with the short scale of ten inches. We can deduce from this that Rozé was working in the seventeenth-century tradition of French harpsichord making.

[10] Cf. §1, *GSJ* X, p. 21.

[11] A. N. Minutier, II, 13 *dec.* 1813.

[12] It will be well known to most readers that German-speaking immigrants were equally predominant among the eighteenth-century harpsichord makers in London.

[13] Will of Feb. 2, 1793; A. N. Minutier, LXIX, 814.

[14] id. XXXVIII. 748.

[15] See Boalch, *Makers* . . . , and add the inscription on a jack of the Hans Ruckers harpsichord presently in the collection of the Paris Conservatoire: *fait par Joachim Swann, rue des fosses Mr le Prince,* 1784.

[16] A. N. Minutier, XIV, 22 *févr.* 1793.

[17] Probably Buntebart, partner of Zumpe (1769–78). Gille de Broule may be the same man. Longman: London (1771–98).

ERIC HALFPENNY

Further Light on the Stanesby Family

THE biographical notice of the Stanesbys, father and son, which I published in *GSJ* XII, can now be enlarged a little in the light of subsequent research. A more careful combing of the available material and the discovery of some new lines of enquiry has uncovered a few more facts that help us to picture the lives of this famous pair, whose combined working period spanned some sixty years from the late-seventeenth to the mid-eighteenth century.

Stanesby I married Mary Kilpin on May 4, 1690, at St Marylebone Parish Church,[1] very shortly after completing his apprenticeship with Garrett. His parents must have removed from Derbyshire to London some time after 1682, when his father, John Stanesby, had been described as of 'Moorly Lyme' in that county. They undoubtedly settled in Marylebone, for Frances, John's wife, was buried there in 1720 at the age of seventy—an age consistent with her having given birth to Thomas I *c.* 1668.[2] Mr A. J. D. Stonebridge, the Borough Librarian of Marylebone, has kindly furnished this description of the parish at that time: '. . . The period in question, around 1690, was thirty years before the commencement of the development of the Harley Estate by the Earl and Countess of Oxford. It was still a small straggling village centred on what is now Marylebone High Street, with a few houses fringed on Oxford Street. The rest was all fields, farms and market gardens. . . .'[3]

The fact that his grandparents were living in this district well into his manhood may account for Stanesby II having taken a wife from the neighbouring village of St Pancras. At least, the connection with St Pancras appears to have been through his wife, who was buried there, April 1, 1743,[4] to be followed, as we already know, by Stanesby II when he died in 1754.

The first child of Thomas Stanesby I, Elizabeth, must have been born in 1691, just before the family moved to Stonecutter Street, St Bride's parish. Her future husband, Samuel Welder, was born in this parish in the same year. They were married—Welder now living in the parish of St Vedast, Foster Lane—on February 24, 1714, at St Bride's.[5] Thomas Stanesby II, born 1692, was Stanesby I's second

child. There followed three others: 3, Mary (b. 1694, d. 1696); 4, Richard (b. 1697); 5, Martha (b. 1698).[6] Nothing further is heard of Richard, but the two surviving daughters married in due course, and, with their respective families, come into the picture later.

Stanesby I took his first apprentice, Edward Wallis, son of Miles Wallis, ironmonger of Ipswich, in 1703,[7] three years before his son joined him. No other apprentices were bound to him.

In my previous notice of the Stanesby family, I drew attention to the long gap of fifteen years separating the end of Stanesby II's apprenticeship and his taking the Freedom of the Turners' Company. I further suggested that the date of the Freedom, 1728, marked the beginning of his practice as an independent craftsman. The problem here has been to locate him firmly at his known working address, the Temple Exchange in Fleet Street, near St Dunstan's-in-the-West, by any of the normal methods. He was certainly there in 1728, when his Freedom was recorded in the Company's List, but it is impossible to identify the premises from the surviving Ratebooks either of the Ward of Farringdon Without or of St Bride's parish; while those of Whitefriars Precinct, an area bordering the south side of Fleet Street which might possibly have included Temple Exchange, are apparently no longer extant. The only contemporary description of the building that I can find is in the *Post Boy* for August 31, 1695: 'In the Temple Exchange are shops and a lodging room appropriate to each shop. Rent free for half a year, fit for all such trades as are in other Exchanges, and at the end of the said half year they are at liberty to quit the said place, if they do not find sufficient encouragement to pay a reasonable rent for the same. There has been some dispute at Law concerning it, which has hindered the Letting, but now all parties are agreed, and without doubt those that do enter therein may in a little time gain sufficiently, being situated in one of the best places of Trade in London near the Temple Gate in Fleet Street by Temple Bar. Enquire of Mr Ongley at the Black Bull in Cornhill.'[8]

The impression given by the above is of a kind of speculative supermarket, and not at all what one might have expected to house Stanesby II's comparatively well-to-do establishment, at least in his later life. Yet his Will dates from this place, and there is no evidence that he ever lived elsewhere, except for the rather tenuous association with St Pancras already mentioned.

Although, therefore, it has proved impossible to trace the beginning of Stanesby II's independent career from the premises he occupied, there are nevertheless very clear indications that this must have been long before 1728. The clue lies in the investments left by him at his

death. By courtesy of the Governor and Company of the Bank of England, the Stock Transfer Books of 3% Annuities, 1726, have been scrutinized, and the Transfers to Stanesby of Stock totalling £1,600, as mentioned in his Will, have been traced.[9] These disclose the remarkable fact that Stanesby's first investment, of £300, was made on April 29, 1727; that in the following June he added to it a further £200, with a similar sum on April 3, 1728, the day on which his Freedom was registered. Thus, in less than a year, and even before being made free of the Turners' Company, Stanesby had been in a position to 'salt down' £700 as a capital investment. This can mean only one thing: that his workshop and his reputation were at that time in so flourishing a condition that there must have been behind them already many years of well-established business. We may grant perhaps that Stanesby was thrifty and enterprising; but for a one-man workshop to have produced so important a surplus earning in the early eighteenth century surely argues a prolific output of wanted goods extending over a very considerable period—we might perhaps pause to visualize what this sum represented in terms of the sale of flutes, recorders and oboes. It would seem, therefore, that we may confidently put back the starting date to 1720 or thereabouts; but it is my opinion that in all probability Stanesby II did not work with or for his father at any time after coming out of indenture in 1713, but set up immediately on his own account. The Stanesbys came of yeoman stock, sturdy and self-reliant, and there are many small indications that they were bound by strong family ties, and were people of integrity and culture. It may well be that the elder Stanesby encouraged his son to fend for himself as soon as possible, as he himself had done on the completion of his apprenticeship.

It will be appreciated that a re-dating of Stanesby II's working period implies also a re-assessment of his extant instruments. The present attribution, 1734–1754, which is given in all modern references, will have to be extensively revised and dates up to twenty years earlier be considered possible, particularly, I suggest, with regard to some of the recorders. What is beyond question is that the earlier limit of 1734 is palpably wrong, and now that this is understood, the younger Stanesby's adoption of the style 'Iunior' in his trade mark must be taken to indicate that it came into use while his father was still living. Indeed, the wording of a passage on his Trade Card, re-read in this light, implies no less: 'N.B. Whereas Instruments are sold about the Town, pretended to be made by Persons who have work'd under my Father or Me, which is an Imposition on the Publick, for my Father or Self never taught or employ'd any other Person in the finishing part of any Instrument whatsoever. . . .'

If we except the shadowy Wallis of Ipswich, this is certainly true of any period before 1737, when Stanesby II took his first apprentice; the statement itself reads like a manifesto from both father and son.

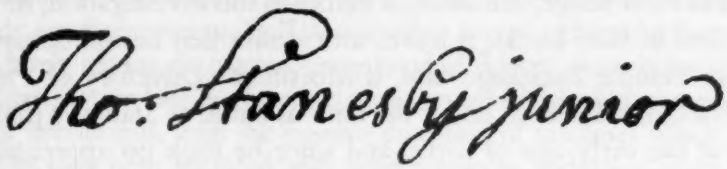
The Trade Card is the work of Gabriel Brooks, the celebrated calligrapher, and of the engraver associated with him, George Bickham. Brooks was born in 1704 and died, comparatively young, in 1741. If we place the beginning of his professional activity at 1725, the probable date of the card is 1728, when Stanesby II took the Freedom. That Stanesby employed the pair to engrave the script monograms that appear on the silver head plates of so many of his flutes is confirmed by a particularly elaborate specimen that recently came into my possession. This bears the following inscription:

The
Gift of his
Royal Highness
FREDERICK
Prince of Wales
to T. Wackett
1738

The fine miniature scroll work surrounding the Gothic script and the masterly spacing of the lettering in the circular disc are in exactly the same style as that of the Trade Card. This flute adds one more—the earliest—to the small number of Stanesby instruments bearing dates.

Stanesby's remaining purchases of Stock, subsequent to those discussed above, were £50 in 1732, £600 in 1736, another £50 in 1739, and two of £100 each in 1751 towards the end of his life. For each of these transactions he attended and signed the Stock Transfer Book, and it will be of interest that up to 1732 he styles himself 'Tho: Stanesby junior', and from 1736, after his father's death, 'Tho: Stanesby'. His autograph signature for the first of these entries is reproduced below. In my view, the last, fairly substantial investment after an interval of twelve years, followed closely by the drafting of his Will, shows Stanesby on the point of retirement from business. Gedney, his apprentice, had become Free of the Turners' Company in 1750, and was thus fully qualified to carry it on, while the Will shows him to have been an integral part of Stanesby's household, with every prospect of inheriting the goodwill of the workshop. Stanesby's unsteady signature to the 1751 Transfer does not augur well for the continual handling of lathe tools. It is doubtful therefore that any of Stanesby's signed work can

date from much after 1750, and I would suggest that as the most likely terminal to his period of activity.



Tho: Stanesby junior
1727

Stanesby's younger sister, Martha, married Charles Alchorne, also an inhabitant of the parish of St Vedast, on September 1, 1729, at St Bride's. Both she and her sister, Elizabeth Welder, honoured the family name by including it among the baptismal names of one of their male offspring. The children of each family are listed below.

Welder:
1. Samuel (1716)
2. Thomas (1717)
3. Elizabeth (1719)
4. Ann (1721)
5. Catherine (1723)
6. Samuel Stanesby (1726)
7. Harriott (?)

Alchorne:
1. Martha (1730)
2. Charles (1732)
3. Stanesby (1733)
4. William (1735)
5. Henry (1736)

By 1752, when Stanesby drafted his Will, both Elizabeth Welder and Charles Alchorne were dead. The surviving Welder children, Thomas, Ann, Catherine, Harriott, and Samuel Stanesby, together with Martha Alchorne, each benefited under the Will by £100 of the 3% Annuities. The sudden death of his Executrix, Mrs Rebecca Browne, so soon after Stanesby in 1754, delegated the Administration to her brother, Thomas Stone, who in due course transferred the above amounts to the beneficiaries. By the end of 1755 he had himself disposed of the remaining interest in the Stock.

That Gedney did in fact take over Stanesby's workshop and business now seems fairly certain. The Registers of St Dunstan's-in-the-West have recently been deposited at the Guildhall Library, London, following the death of the Reverend Prebendary A. J. MacDonald who had examined them in connection with my previous article on this subject. Having re-examined them myself, I must reverse my former statement concerning the death of Caleb Gedney, which was unfortunately over-

looked by Dr MacDonald, as the entry was made out of sequence in the Register. Gedney was buried in the East Vault of St Dunstan's on May 14, 1769[10]—the year given by Lyndesay Langwill. His address is given as Fleet Street, and since, as before in this investigation, he cannot be traced in Rate books, it leaves little doubt that he still occupied the elusive Temple Exchange, and, if Mortimer's Directory of 1763 is to be believed, still traded under the famous name of Stanesby Junior. He died at the early age of forty, and since he took no apprentices, the direct line of the Stanesby tradition died with him.

To sum up then, the approximate working periods of these three makers may be re-computed thus:

Thomas Stanesby I (b. *c.* 1668): 1690–1733 (he then quitted Stonecutter Street) (d. 1734).

Thomas Stanesby II (b. 1692): *c.* 1715–*c.* 1750 (d. 1754).

Caleb Gedney (b. *c.* 1729): *c.* 1750–1769 (d. 1769).

NOTES

[1] Harleian Society: Parish Registers. Vol. 47.

[2] Thomas Smith: *Topographical Account of the Parish of St. Marylebone* (1833).

[3] Letter to the writer, October 15, 1959.

[4] St Pancras Registers.

[5] GH MS. 6540/4, St Bride's Registers.

[6] GH MS. 6540/3, St Bride's Registers.

[7] GH MS. 3302/2, Apprentice Register of the Turners' Company.

[8] F. G. Hilton Price: 'The Signs of old Fleet Street', *Proc. Roy. Arch. Institute*, 1895.

[9] For much help and advice concerning Stanesby's 3% Annuities, and for kindly supplying the photostat signature I am greatly indebted to Mr J. A. Giuseppi, F.S.A., and Mr R. A. Woods, of the Bank of England Record Office.

[10] GH MS. 10, 353. St Dunstan's-in-the-West Registers.

APPENDIX: INSTRUMENTS BY THE STANESBYS AND CALEB GEDNEY

The following list of the known instruments made by the two Stanesbys and by Gedney has been compiled with the help of the Treasurer, Editor and many owners and others who have kindly supplied information about instruments in their care. In particular, I am indebted to Mr William Lichtenwanger of the Library of Congress who has answered at great length my complicated queries, and has provided the texts of Dayton Miller's own descriptions of his instruments.

The survival of so large a number—about fifty—from this group of makers, though doubtless accidental in detail, prompts a few reflections, the first being

that they are in any case rarer than Stradivari violins. Stanesby I contributes a dozen, his son about thirty, and Gedney seven. There are nine of the oboe types and four bassoons, including the celebrated double bassoon associated with Handel's *Fireworks Music*. The majority are, however, flutes and recorders in nearly equal proportions. Half the surviving output of Stanesby II are flutes, which surely reflects the contemporary trend of fashion, many being of ivory with silver mounts bearing the monograms or crests of wealthy owners. None of these instruments, with the possible exception of the flutes which would originally have been provided with interchangeable mid-upper joints, could have been played in concert after about 1770, because of their low baroque pitch.

It is encouraging to note that about thirty of these instruments are in the hands of members, or of museums represented in the Society's membership. The list shows present owner and location, with a few notes on provenance, condition, material, *etc.*, where known. It has not been possible to check every entry at source, and corrections, amendments and additions will be most welcome. Each instrument has been allotted a serial number under its maker's name with the object of identifying it hereafter. Numbers following the owner or source are those of the permanent collection in which it is held. 'GS' numbers refer to the Society's 1951 Exhibition Catalogue.

LIST A: STANESBY I

Mark: above, centre, initial T; STANESBY set on slight upward curve; below, centre, eight-point sunburst or star. Two type-faces used: large for recorders, small for oboes.

Working period: 1690–1733.

RECORDERS

Super-treble

1. Dayton C. Miller Collection, Library of Congress (hereafter 'Miller'), No. 1214. Ivory '6th flute'. Ex-W. Howard Head, London.

2. Berlin Collection, No. 2806. Lost during 1939–45 war.

Treble

3. Adam Carse Collection, Horniman Museum, London (hereafter 'Carse'), No. 319. Ebony with ivory full mounts. Ex-W. Howard Head, London. (Illus: Carse Cat. 1951, p. 16.)

4. Carl Dolmetsch, Haslemere. Re-tuned.

5. Eric Halfpenny, Ilford. GS 10. Head, apparently original, by Bressan. Pearwood, unmounted. Ex-Galpin coll., ex-Dr R. Harding. (Illus. and dimensions: *GSJ* IX, Pl. VIII, B.)

Alto

6. Leonard Lefkovitch, Bourne End, Bucks. 'Voice flute' in D. Unmounted.

Tenor

7. Ronald Castle, Wellington, New Zealand.

Bass

8. Eric Halfpenny. GS 10. Pearwood, brass key, crook and head cap ring. Attributed to Stanesby I on stylistic grounds. Marked, all joints M.S. (? Mary Stanesby), standing on a line looped or scrolled at each end. Ex-Galpin coll., ex-Dr Harding. (Illus: forthcoming Pelican Book, *Musical Instruments*.)

OBOES

9. Eric Halfpenny. Ex-Philip Bate, London. Type A, 3-keyed. Figured and stained pearwood. Ivory full mounts.

10. Carse No. 232. Type A, 3-keyed. Unmounted. (Dimensions: *GSJ* II.)

11. Carse No. 277. Type A, 3-keyed. Ivory half-mounts. Ex-Nettlefold coll. (Illus.: Carse Cat. 1951, p. 33.)

12. The late F. G. Rendall. Type A, 3-keyed. Unmounted. GS 66. (Illus. and dimensions: *GSJ* II, Pls. II & III.)

LIST B: STANESBY II

Marks: 1. STANESBY on a slight upward curve, with a dolphin beneath, centre. 2. A dolphin above, centre, with STANESBY/IUNIOR below, curved. 3. STANESBY/IUNIOR as in (2), and beneath a fleur-de-lys, centre. 4. STANESBY/IUNIOR as in (2), with no other mark. 5. STANESBY/LONDON, set in straight lines. 6. STANESBY/JUNIOR, more sharply curved than (2).

Working period: *c.* 1715–*c.* 1750.

RECORDERS

Super-treble

1. Edgar Hunt, Chesham Bois, Bucks. In carved ivory, '6th flute'. GS 2.

2. Dr René Clemencic, Ivory. '5th flute'. GS 3. Ex-Anthony Baines, ex-Galpin coll.

Treble

3. Mrs Irene Bennett, Shipston-on-Stour. Mark (3) (fleur-de-lys). Re-voiced.

4. Carse No. 275. Unmounted. (Dimensions: *GSJ* VIII, p. 84.)

5. Mme. G. Thibault, Comtesse de Chambure, Paris. Mark (1) (dolphin).

6. Capt. Roger G. Gerry, U.S. Navy. Marked 'F'.

7. Eric Halfpenny. GS 10. Pearwood, unmounted. Mark (1) (dolphin). Ex-Galpin coll. (Illus. and dimensions: *GSJ* VIII.) This instrument has exactly the same speaking length as No. 5.

Tenor

8. Dr Walter Bergmann, London. In B♭. Mark (2) (dolphin), also '4', denoting '4th flute'.

9. Comtesse de Chambure. With flute-type foot joint. Apparently the prototype of a facsimile owned by Edgar Hunt. Marked 'C'.

10. Dr Rosamond Harding, Royston, Herts. GS 10. Ex-Galpin coll. (RME Cat., 1890, No. 13.) In B♭.

11. Dr Mary Lobban, Cambridge.

12. Philip Bate, London. Ivory, silver mounts and key, engraved head plate. GS 28.

13. Carse No. 281. Ivory, silver mounts and key, engraved head plate.

14. Carse No. 264. As above, but with three added keys.

15. Carse No. 241. Wood, with ivory full mounts. (Illus.: Carse, *Musical Wind Instruments*, 1939, Pl. 1, A.)

16. Max Champion, Sevenoaks, Kent. GS 29. Wood with ivory full mounts. Formerly with three added keys, now removed.

17. Max Champion. *Flute in F.* Ivory, unmounted. GS 23.

18. Eric Halfpenny. Ivory, silver mounts, engraved head plate. (Imperfect.)

19. Eric Halfpenny. Wood, ivory full mounts, engraved head plate, dated 1738.

20 (a & b). Miller No. 269. Ivory, silver mounts and key, engraved head plate. This example is in fact made up of parts of two flutes by Stanesby II. Ex-G. S. Beaman, Princeton, Mass., U.S.A., and Mrs A. Conning, Hutchinson, Minn., U.S.A.

21. Miller No. 388. Ivory, silver mounts, engraved head plate, with five added keys. Ex-J. T. Shiel, Manchester.

22. Miller No. 1030. Ivory, silver mounts, ivory cap. Added silver mounts, much repaired. Ex-W. Howard Head, London.

23. Miller No. 1125. Ivory, unmounted, silver head plate. Ex-W. Howard Head.

24. Miller No. 1177. An anonymous 4-keyed flute, of which only the head is marked STANESBY LONDON (Mark 5). This head carries the normal socket, the reverse of Stanesby II's usual practice (but see No. 25, below). Ex-W. Howard Head.

25. Ridley Collection, Luton Museum, Fl. 1. Boxwood, unmounted. *Normal head socket.* (Illus.: Ridley Cat., 1957, Pl. 1.)

26. Mrs Christine Ring, Haslemere, Surrey.

OBOES

27. Philip Bate. GS 67. Type B, 2-keyed, unmounted. (Dimensions: *GSJ* II, p. 10.)

28. Peterborough Museum Society, No. 11. *Type A, 3-keyed*, unmounted, but with restored middle socket with half mount. Mark (3) (fleur-de-lys). This instrument is of the English baroque pattern and similar in all outward details to the work of Stanesby I. The bore, however, is narrower.

Vox Humana (Tenor oboe)

29. Victoria and Albert Museum, London. 2-keyed, unmounted. (See also: Stanesby Iunior, *A Scale of the Notes for the Vox Humana*, Brit. Mus. i 600/7, reproduced: *GSJ* V, Pl. III.)

BASSOON

30. Rev. C. J. Sharp, Shalford, Surrey. 4-keyed, brass mounts and keys. Dated 1747. GS 92. (Illus.: Galpin: *Old Eng. Insts. of Music*, 1910, Pl. XXXIV.)

Ex-Galpin coll. As in the case of No. 19, above, the dating of this instrument is due, not to the maker but to an inscription engraved on one of the brass rings, which runs: 'Ex Dono R. [coat of arms] Jenison, Arm. 1747'. The coat armour is that of the Jenison family of Elswick and Walworth, Co. Durham, the only possible member of which is Ralph (1696–1758), Master of the Buckhounds to George II, and sometime Member of Parliament for Newport, Isle of Wight, and for Northumberland.

Double Bassoon

31. National Museum of Ireland, Dublin. GS 104. 4 brass keys, brass mounts. Dated 1739. (Illus.: L. G. Langwill: 'The Double Bassoon, its Origin and Development', *P.R.M.A.* 69, 1943.) (For a discussion of this instrument, see E. Halfpenny: 'Stanesby Major and Minor', in *Music & Letters*, January, 1953.)

CLARINET

32. Miller No. 275 is a *Clarinet* by H. Wrede (1810–1849, see L. G. Langwill, *Index of Wind-Instrument Makers*, 1960), with a barrel marked STANESBY JUNIOR (mark 6). Miller equated Wrede's unicorn trade mark—used by several London makers at that period—with a similar device engraved on the head plate of flute No. 269 (No. 20, above), and concluded that Wrede may have been Stanesby's business successor. It is clear however that No. 269 bears an owner's crest, as do all similar head plates, and not a trade mark. This fragment is of the greatest importance as it provides the only known evidence that Stanesby II made clarinets as well as other woodwinds, and also the earliest dateable evidence for a clarinet of English make. It is a regular C barrel, or more properly, a mouthpiece socket from which the broken beak has been cut and replaced by a separate mouthpiece, a common practice. Dayton Miller himself provided the upper ivory ring. Stanesby II was of course living during the formative period of the clarinet, and it is very satisfactory to know that he did in fact play some part in the development of the instrument in this country.

NOTE: The variety of marks used by Stanesby II has only come to light during the present investigation, and is now being studied with a view to the closer dating of instruments bearing different marks. I should be grateful if all owners of such instruments listed above would examine them carefully and report to me any deviations from the normal and familiar STANESBY/JUNIOR other than those already noted.

LIST C: CALEB GEDNEY

Mark: CALEB GEDNEY, on two curved lines. Working period: *c.* 1750–1769.

FLUTES

1. Keighley Museum. 1-keyed. Ivory.
2. Max Champion. Wood. 6-keyed. Dated 1769.

Bass Flute

3. George Grocott, Cheadle Hulme, Cheshire. 1-keyed, wood, ivory full mounts. Marked 'G', *i.e.* bass flute in G.

OBOE

4. Colchester Museum. Type C, 2-keyed. Ivory mounts, engraved silver keys. GS 70.

Vox Humana

5. Museum of Fine Arts, Boston, U.S.A. 2-keyed. Ex-Galpin coll.

BASSOONS

6. Carse No. 205. (No. 153, R.M.E. Cat., 1890.) 4-keyed. (Illus.: Carse Cat., 1951, p. 40.)

7. Royal Academy of Music, London. 6-keyed.

Provisional Index of Present-day Makers of Historical Musical Instruments (Non-keyboard)

For some time now the Society has been receiving enquiries as to where one may obtain this or that kind of historical instrument, and so we were glad to receive from Bruce Braswell of Toronto, in the early summer of 1959, the suggestion that an Annotated Index of Makers might usefully appear in the JOURNAL. Mr Braswell generously offered to supply all the information that he could, and in fact, in his subsequent collaboration with the Editor, he has taken on the greater share in the work of locating and contacting the individual makers. Our thanks are also due to musical journals, especially *The Musical Times*, London, and *Hausmusik*, Kassel, who published our letters announcing the project.

It was naturally obvious that it would take a long time to explore the field thoroughly, yet we felt that it would be most useful to press ahead and publish such data as we could assemble by about the end of 1959. But it also became clear that the extent of our data and lack of first-hand knowledge of every product, would fail to justify the title originally proposed: the 'Annotated Index' must remain a target for the future. For a further contraction, the Editor is solely responsible: a very large proportion of the bulk of the completed entries was found to consist of harpsichord and clavichord specifications; whereas enquiries received from members have been concerned almost entirely with non-keyboard stringed and wind instruments. And so, to leave room for other contributions destined for this number of the JOURNAL, the keyboard items are being held over, to appear later along with the expected additions and amendments to the non-keyboard Index. For this delay, the Editor sincerely apologizes to keyboard makers who have so kindly gone to the immediate trouble of sending particulars. A list of their names and addresses follows the Index in an Appendix.

A further word is needed concerning the scope and intention of the Index. 'Historical musical instruments' are newly-built instruments, and include: (1) instruments that were played in music in the past and then ceased to be played until the modern period of revival; (2) former designs of those instruments which have been played continuously from the time of their first appearance up to the present. Beyond this,

what is a historical instrument to be? Above all, it should be a good musical instrument, and play well. Should it necessarily be an exact copy of a representative original? Perhaps it is more important that the maker should *know* his prototypes inside and out than that he be required faithfully to repeat them for ever: indeed a design can scarcely remain forever static in the hands of an artist-craftsman, with his access to modern materials and technology, considerations of modern performance conditions and of costs, etc. It is notable that many of the finest of the present-day makers began with restorations for museums or private individuals, and so gained their understanding of an instrument's feel in the making whereby they have become able to reproduce original designs exactly when so requested, and also to let them grow in their hands—without, however, sacrificing concentration upon an instrument's *performance character* which united the prototype with the musicians of its period and which is implicit in the expression 'historical musical instrument'. What, then, of the period before the sixteenth century, whence so few actual examples survive and a modern maker must work from iconographic evidence? The difficulties that arise are plain with bowed stringed instruments, where a maker is confronted with an immense variety of forms of which only one aspect may be visible while interior design can only be guessed by probability and trial. Nobody can deny, for example, that the Renaissance fiddles which Safford Cape had constructed, after paintings, for the expert musicians of his Pro Musica Antiqua are *bona fide* historical instruments; but should we necessarily exclude from our consideration *all* the '*Fideln*' now made so much in Germany, even when advertised for 'house' or 'school' music and described as instruments of new design? If well made, their use in the earlier part-music of the sixteenth century (when viol designs were quite unstandardized) or, as some makers suggest, in medieval music with lute, etc., is surely defensible—certainly among music-lovers who cannot afford to place special orders, while a cheap model may often play very well—probably quite as well as a cheap instrument of a former period if we may judge by the average craftsmanship of present-day folk instruments in the countries of South-East Europe. These last may also, in several cases, have claims to historical relevance when we turn back to the High Middle Ages, and we hope gradually to collect a list of the present makers of them.

It must be stressed that in making this Index we have no personal experience—in many cases not even indirect opinion—of every product of every maker listed; and even if we had such experience, the assessment of a historical instrument so often turns out to be a conflict between individual opinions. Nor can we vouch for historical genuine-

ness in all cases. So we have compiled no buyer's guide—and do not give prices, or delivery times (which anyway might act invidiously against a master-craftsman who works alone). Our present purpose is to indicate, to those who do not know already, where makers are to be found. A few names which are understood to be purely manufacturies for schools, etc., are not included, while on the other hand there must be many fine historical makers of whom we as yet know nothing, and there are one or two important makers from whom we have been unsuccessful in obtaining information. Thus the index is to be taken partly as exploratory, and its value will rest largely upon any questions and discussions that it may lead to. The Editor will meanwhile be grateful for any corrective or additional information about makers and their instruments.

Abbreviations in the Index:—Last c.: last correspondence; str.: string(s). Numbering is according to the compilers' reference plan, but it has been felt advisable to include many of the makers' own terms, especially with the German makers, and here *DD*, for example, will be understood as *D'*.

GERMANY AND SWITZERLAND

Johannes, Adler, Markneukirchen, Adorfer Strasse 12 (*East Germany*). (Last c. Feb. 1960.)

RECORDERS

From Kleinflötlein in *f''* to Grossbass in *c*, with 'German' or 'English' (baroque) fingering, and double holes or semitone key, as desired.

VIOLE DA GAMBA

I. Str. length/body length in cm.: 1. Discant, *d*, 36.4/36. 2. Alt, *G*, 50.5/50. 3. Tenor-bass, *D*, 66.6/66; 68.6/68.

II. Florentin-Kniefiedel. Fretted, 6 metal str., viol tunings. Body lengths: Hochsopran, *g*, 31.5. Sopran, *d*, 38.5. Alt, *G*, 50. Tenor, *D*, 59. Kleinbass, *GG*, 74.5. Grossbass, *DD*, 85.

FIDELN

Either 3 str. as follows, or including a fourth str. at the fifth below. Str. length/body length: 1. Soprano, *d'*, *a'*, *e''*, 32.8/32.5. 2. Alt, *g*, *d'*, *a'*, 36.3/36; 37/36.7. 3. Tenor, *c*, *g*, *d'*, 40.4/40; 42/41.6.

QUINTON. 5 str. 1. Diskant. 2. Tenor-Alt.

VIOLA D'AMORE. 7 str. and 7 sympathetic. 36.3/36.

POCHETTE. 4 str. from *c'* or 3 str. from *g'*.

VIOLINO PICCOLO. *c'*, 25.2/25; 26.2/26.

VIOLIN. Baroque dimensions. 32/31.7.

Gebr. Alexander, Rhein. Musikinstrumenten-Fabrik G.m.b.H. Mainz, Bahnhofstrasse 9. (Last c. Sept. 1959.)

TROMBONES

I. Exact copies of narrow-bore, baroque instruments; specifications by Prof. W. Ehmann: 1. Alt-Barockposaune in E♭. 2. Tenor-Barockposaune in B♭. 3. Bass-Barockposaune in F.

TRUMPETS

I. B♭ Barock-Trompete, from specifications by Ehmann. With valves.

II. Bach-Trompeten in D and F (full length) to designs by W. Menke. With 2 valves.

HUNTING-HORN

I. Parforce-Jagdhorn in E♭, large hooped form.

Bärenreiter-Verlag. Kassel-Wilhelmshöhe, Heinrich-Schütz-Allee 29–37. (Last c. Oct. 1959.)

RECORDERS

I. Weitmensurierte Chorblockflöten, wide-bore, 17th-century design, 1½ octaves, in pear: 1. Diskant in *f''*. 2. Sopran in *c''*. 3. Alt in *f'*. 4. Tenor in *c'*. 5. Bass in *f* (under construction). 6. Grossbass in *c* (planned).

II. Barock-Blockflöten: (a) Barock-Soloflöten: 1. Sopran in *c''* (boxwood, rosewood, or jacaranda). 2. Alt in *f'* (pear, Elsbeere, boxwood, rosewood, or jacaranda). (b) Normaler Chorblockflöten: 1. Diskant in *f''*, Sopran in *c''*, Alt in *f'*, Tenor in *c*, Bass in *f*, Grossbass in *c* (planned).

Dr Rudolf Eras, Geigenbaumeister. Kandern/Baden, Blauenstrasse 10. (Last c. Oct. 1959.)

OBOE

1. Barock-Oboe in *c'* with 2 keys; copy of an instrument in the Gewerbemuseum, Markneukirchen, by a Markneukirchen Master. Palisander, cocopolo, or boxwood.

TRANSVERSE FLUTE

1. Barock-Traverso in *d'* with 1 key; copy of an instrument of Quantz in the Gewerbemuseum, Markneukirchen. Palisander or boxwood.

CORNETTS

I. Krumme Zinken (curved cornetts), with separate mouthpiece and covered in black leather: 1. Diskant in *d'*. 2. Alt in *a*. 3. Tenor in *f*.

II. Gerade und Stille Zinken (straight and mute cornetts). Provided with two mouthpieces for use either as straight or as mute cornetts. All models made in natural maple: 1. Diskant in *d'*. 2. Alt in *a*. 3. Tenor in *f*.

III. Cornetts of either type are available in *g*, *a*, *b♭*, *c'*, and *c'♯*.

ness in all cases. So we have compiled no buyer's guide—and do not give prices, or delivery times (which anyway might act invidiously against a master-craftsman who works alone). Our present purpose is to indicate, to those who do not know already, where makers are to be found. A few names which are understood to be purely manufacturies for schools, etc., are not included, while on the other hand there must be many fine historical makers of whom we as yet know nothing, and there are one or two important makers from whom we have been unsuccessful in obtaining information. Thus the index is to be taken partly as exploratory, and its value will rest largely upon any questions and discussions that it may lead to. The Editor will meanwhile be grateful for any corrective or additional information about makers and their instruments.

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Dr Rudolf Eras, Geigenbaumeister. Kandern/Baden, Blauenstrasse 10. (Last c. Oct. 1959.)

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I. Krumme Zinken (curved cornetts), with separate mouthpiece and covered in black leather: 1. Diskant in *d′*. 2. Alt in *a*. 3. Tenor in *f*.

II. Gerade und Stille Zinken (straight and mute cornetts). Provided with two mouthpieces for use either as straight or as mute cornetts. All models made in natural maple: 1. Diskant in *d′*. 2. Alt in *a*. 3. Tenor in *f*.

III. Cornetts of either type are available in *g*, *a*, *b♭*, *c′*, and *c′♯*.

SHAWMS

1. Diskant-Pommer in *c'*. 2. Alt-Tenor-Pommer in *f* with 1 key.

RECORDERS

I. Praetorius-Blockflöten, wide-bore, bore slightly conical. All models made out of natural maple with black rings; copies of a set by Kynsecker in the Germanische Museum, Nürnberg: 1. Diskant in *f''*. 2. Sopran in *c''* (or *d''*). 3. Alt in *f'*. 4. Tenor in *c'* (normally with 1 key). 5. Bass in *f* (direct blown or with crook). 6. Grossbass in *c*.

II. Barock-Blockflöten, narrow, sharply conical bore; pear or natural maple. Same sizes as for Praetorius recorders except Grossbass not available.

MEDIEVAL FIDDLES

I. With 3, 4, or 5 str., after representations by Memling and those on the cathedrals at Chartres and Santiago de Compostela. Str. lengths: 1. Diskant in *g*, 33 cm. 2. Alt in *c* (or *d*), 37.5 cm. 3. Tenor in *F* (or *G*), 42.5 cm. (*da braccio*) or 48 cm. (*da gamba*).

VIOLE DA GAMBA

I. Renaissance-Chorgamben (consort viols); copies of instruments by Ventura Linarol (Venice, 1585). Str. lengths: 1. Diskant in *d*, 35.5 to 37 cm. 2. Klein-Alt in *c*, 38 to 40 cm. 3. Alt in *A*, 46 to 48 cm. 4. Alt-Tenor in *G*, 50 cm. 5. Bass in *D*, 66 to 71 cm. 6. Kontrabass in *DD*, 90 cm.

II. Barock-Sologamben: 1. Diskant, 37 to 38 cm. 2. Alt. 3. Bass, 64 to 68 cm.

VIOLA BASTARDA

I. 6 str. and 6 sympathetic str., after Praetorius; str. length, 60 cm.

REBEC

I. 3 str. Copy of Italian instrument (*c.* 1700) in the Leipzig (formerly Heyer) Collection. Diskant in *g*, 31 cm.

VIOLE DA BRACCIO. Baroque models.

I. Quartgeige. II. Geige: 1. Frühes Modell (*c.* 1600), after a violin by Ventura Linarol (Venice, 1581). 2. Hoch-Barockes Modell (*c.* 1700), after violins by Stainer, Rogeri, etc. III. Bratsche (viola). IV. Tenor geige (tenor violin), 40 cm. V. Viola pomposa and da spalla, 42.5 cm. VI. Violoncello piccolo, 60 cm. VII. Violoncello.

VIOLA D'AMORE

I. 7 str. with 7 sympathetic str.

BARYTON

I. 6 str. and 9 sympathetic str., after Stadelmann and others. Str. length, 61–62 cm.

HARPS

I. After medieval representations. 2½ octaves (*c'–f'''*) to 3½ octaves (*c–f'''*).

BOWS for Fiddles, Viols, etc.

I. Two models: curved for consort use and less curved for solo. Average length of hair: 1. Diskant, 53 cm. 2. Alt-Tenor, 56 cm. 3. Bass, 59 cm.

Helmut Finke, Metallblasinstrumentenbau. Herford, Sandbrede 2. (Last c. Sept. 1959.)

TROMBONES

I. Exact copies of narrow-bore baroque instruments by Haas: 1. F—Altposaune (or in D). 2. C—Tenorposaune (or in B♭). 3. D—Bassposaune (or in E♭).

II. Also available, exact copies of the same sizes by Ehe, Schmied, etc.

III. New models designed according to baroque specifications by Prof. W. Ehmann: 1. Altposaune in F. 2. Tenorposaune in B♭. 3. Tenor-Bassposaune in B♭ (with *Quartventil*).

TRUMPETS

I. Exact copies of *Clarintrompeten* in D or C by Haas, Ehe, Schmied, etc.

II. New model Trompete in B♭ designed according to baroque specifications by W. Ehmann. With valves.

Günther Hellwig, Geigenbaumeister. (24a) Lübeck, im Burgtor. (Last c. Jan. 1960.)

VIOLE DA GAMBA

Str. lengths: Treble (Diskant-viola da gamba; 6 str.) 37 cm.; Tenor (Alt-Tenor; 6 str.) 51 cm.; Division (kleine Bass-viola da gamba; 6 or 7 str.) approx. 64 cm.; Consort Bass (grosse Bass-viola da gamba; 6 or 7 str.) 69 cm.

In preparation: Double-bass viol, 6 str.

VIOLINS, to the old proportions. REBECS.

Willy Hopf & Co. K.G. (16) Wehen bei Wiesbaden. (Last c. Oct. 1959.)

RECORDERS

Blockflöten: (a) Standard-Modell. (b) Solo-Modell (pear). (c) Barock-Modell (pear). Each include: 1. Sopran in *c''*. 2. Alt in *f'* (with or without key). 3. Tenor in *c'* with 1 key. 4. Bass in *f* with 2 keys.

N.B. Some of the models and sizes listed here are available only in the so-called German fingering. Special Models: 1. Diskant (sopranino) in *f''*. 2. Sopran in *a'* (pear; with or without 3 half-tone keys). 3. Sopran in *d''*.

GUITAR, PSALTERY (PSALTERIUM), SCHEITHÖLZ, ETC.

Details on request.

VIOLE DA GAMBA

1. Diskant, 36.5/40.5 cm. 2. Alt, 47/52. 3. Tenor, 60/65. Bass, 65/71.

VIOLE D'AMORE, 7+7 str.

FIDELN, newly devised instruments.

6 str., Terz-Quart-Stimmung: 1. Hochdiskant in *g*. 2. Diskant in *d*. 3. Alt in *G*. 4. Tenor in *D*. 5. Bass in *G*.

Hans Jordan, Instrumentenbaumeister. Markneukirchen, Feldstrasse 14 (East Germany). (Last c. Feb. 1960.)

LUTES

Lutes, theorbo-lutes, theorbos; in Renaissance or Baroque tunings.

I. Alt-Laute in G, 6 to 10 courses, after an example by Magnus Hellmer of the beginning of the 17th century.

II. Larger lutes and theorboes, chiefly after models by Magnus Tieffenbrucker, Venice, of about the same period as the above.

VIOLS AND VIOLINS

After Tielke, Stainer, and others. (Herr Jordan writes that the orders for lutes are today occupying most of his time.)

Emmo Koch, Werkstatt für historische Musikinstrumente und Fidelbau. Bremen, 17 Achterdick 21. (Last c. July 1959.)

VIOLE DA GAMBA

Str. lengths: Pardessus (high treble) in *g*, 29 cm.; Sopran (treble) in *d*, 36 cm.; Alt (tenor) in *G*, 45–51 cm.; Tenor (division viol) in *D*, 63 cm.; Bass (consort bass) in *D*, 70–78 cm.; also same with 7 str.; Contrabass (violone) in *DD*, 105 cm.

FIDELN

4- and 6-str. Also 'Violen' (gamba-like Fideln, gut-strung).

OTHER STRINGED INSTRUMENTS (including Hurdy-Gurdy) to order.

Franz Küng, Musikinstrumente und Blockflötenbau. Schaffhausen, Grabenstrasse 3, Switzerland. (Last c. Aug. 1959.) British Agent: Schott.

RECORDERS

I. Blockflöten, 'baroque' models: (a) Modell I, Sopran in *c''*, Schulflöte (pear). (b) Modell II, standard model: Sopran in *c''* (pear, maple, cherry). Alt in *f'* (pear, maple). Tenor in *c'* (pear, maple). (c) Modell III, Chorflöten: Sopranino in *f''* (Bubinga, sandalwood, eucalyptus, palisander, rosewood, olivewood, grenadilla). Sopran in *c''* (Bubinga, sandalwood, eucalyptus, palisander, Pao-Rose, lemonwood, olivewood). Alt in *f'* (Bubinga, sandalwood, cherry, eucalyptus). Tenor in *c'* (Bubinga, sandalwood, cherry). Bass in *f* (pear, cherry, Bubinga). Grossbass in *c* (pear). (d) Meisterstück-Blockflöten: Sopran in *c''* (palisander, olivewood, rosewood, grenadilla). Alt in *f'* (palisander, cocopolo, lemonwood, Pao-Rose, olivewood). Tenor in *c'* (palisander, cocopolo, Pao-Rose, olivewood). Bass in *f* (palisander, Pao-Rose, olivewood).

II. Weitmensurierte (wide-bore) Blöckfloten: to order.

FLUTE

I. Traverso: to order.

Hermann Moeck Werkstätten. (20a) Celle/Hannover. (Last c. Oct. 1959.)

RECORDERS

I. Blockflöten: (a) Standard Model: 1. Sopran in *c''*. 2. Alt in *f'* (with or without key). 3. Tenor in *c'* with 1 key. 4. Bass in *f* with 2 keys. (b) Baroque Model: 1. Kleinflötlein in *f''*. 2. Sopran in *c''*. 3. Alt in *f'* (with or without key). 4. Tenor in *c'* with 1 key. 5. Bass in *f* with 2 keys. 6. Grossbass in *c*.

VIOLE DA GAMBA

Str. length: 1. Sopran in *d*, 14 in. 2. Alt-Tenor in G, 20½ in. 3. Tenor-Bass in *D*, 24½ in.

Conrad Mollenhauer, Holzblasinstrumentenbau. Fulda, Langebrückenstrasse 14. (Last c. July 1959.)

RECORDERS (Blockflöten).

1. Diskant (sopranino) in *f″*. 2. Sopran (descant) in *c″*. 3. Alt (treble) in *f′*: a. without key; b. with key. 4. Alt (alto) in *e′*. 5. Tenor in *c* with key. 6. Bass in *f* with 2 keys: a. direct blown; b. with crook. 7. Gross-Bass (great bass) in *c* with 6 keys.

FLUTE

1. Flauto-Traverso. In 4 pieces, with 1 key: a. pearwood; b. boxwood.

Also *Chor-oboen* in four sizes: Soprano in *c′* (8 keys). Alto in *f* (8 keys). Tenor in *c* (12 keys). Bass in *F* (12 keys).

Josef Monke, Metall-Blasinstrumenten-Bau. Köln-Ehrenfeld, Körnerstrasse 48–50. (Last c. Sept. 1959.)

TROMBONES

Designed from a 17th-century instrument: 1. Posaune in B♭. 2. Posaune in high B♭, an octave higher than No. 1.

Rudolf Otto, Flötenbau. Neufra bei Rottweil. (Last c. Dec. 1959.)

RECORDERS

I. Blockflöten: (a) in baroque fingering in pear or maple: 1. Sopran in *c″*. 2. Alt in *f′* (with or without key). 3. Tenor in *c′* with 1 key. 4. Bass in *f*, with double key for *f*/*f*♯, and crook. (b) Meisterflöten in baroque fingering: 1. Sopran in *c″* (boxwood or Königsgrenadille). 2. Alt in *f′* (boxwood, Königsgrenadille).

Karl Roy, Geigenbaumeister. Mittenwald/Karwendel, Riedscharteweg 2. (Last c. Oct. 1959.)

VIOLE DA GAMBA

Str. length/body length, in cm.: 1. Diskant in *d*, 36.5/40.5. 2. Alt in *G*, 47.5/52. 3. Tenor-Bass in *D*, 60/65.5. 4. Bass in *AA*, 65/71. 5. Contrabass in *DD* (or *EE*), 94/99.

N.B. These measurements may be changed on request.

VIOLE D'AMORE

1. 5 to 7 str., German or English form.

VIOLE DA BRACCIO

1. Tenor-Geige in G, after an instrument by Jacobus Stainer.

LUTES

1. Doppelchörige Knickhalslaute in Renaissance or Baroque tuning with up to 13 courses of str.

(Also in theorbo form, with number of courses as requested.)

THEORBOS. To order.

OTHER INSTRUMENTS built to special order: Baryton, Viola bastarda, Lira, Trumscheit (tromba marina), Hurdy-Gurdy, Medieval Fiddles.

Martin Skowroneck. Bremen, Gravelottestrasse 95. (Last c. Jan. 1960.)

FLUTES

I. Renaissance type (cylindrical, in one piece).

II. Baroque: Hotteterre type, in three joints, at the low pitch.

III. Baroque: mid-18th-century type, in four joints, at low or modern pitch.

RECORDERS

I. Renaissance recorders (wide-bore, in one piece). Sopran to Bass.

II. Baroque recorders.

Eugen Sprenger, Geigenbaumeister. Frankfurt am Main, Hochstrasse 42. (Last c. Sept. 1959.)

GOTHIC FIDDLES

I. Gothische Fidel: 1. Diskant, 2. Alt, 3. Tenor.

LUTES

1. Laute: details on request.

VIOLE D'AMORE

1. Viola d'amore: details on request.

VIOLE DA BRACCIO

Details on request: 1. Geige, 2. Bratsche (viola), 3. Violoncello.

VIOLE DA GAMBA

Str. length/body length, in cm.: 1. Diskant, 38/40. 2. Alt-Tenor, 52/53. 3. Tenor-Bass (copy of an instrument by Johann Friedrich Hoffmann of Leipzig), 69/68.

BOWS in the old style for Viols, Fiddles, etc.

Otto Steinkopf, Historische Holzblasinstrumente. Berlin-Steglitz, Horst-Kohl-Strasse 6. (Last c. Nov. 1959.)

CRUMHORMS (Krummhörner).

After originals in the Berliner Instrumentensammlung. All instruments available with or without double holes. Reeds of plastic. 1. Sopran in *c'*. 2. Alt in *g*. 3. Alt in *f* (with or without *a'*-key). 4. Tenor in *c* (with or without *e'*-key). 5. Tenor in *B♭*. 6. Bass in *F* (with or without *a* and *b♭* keys). 7. Grossbass in *C* (in preparation).

CORNETTS (Zinken).

1. Cornettino in *c′* (with additional fingerhole for little finger of right hand; straight or curved). 2. Cornetto in *a* (curved, covered in leather). 3. Alt-Tenor Zink in *f* with 1 key (original at Stockholm). 4. Tenor in *c* with 3 keys (after Praetorius). 5. Stiller Zink (mute cornett) in *d′* (in preparation; after original in the Berlin Collection; also available in *c′* with additional fingerhole, as No. 1 above).

SERPENTS (in preparation).

SHAWMS (Pommern).

After originals in the Berlin Collection. Designation of 'in *c*' or 'in *f*', etc., indicate type of fingering and not necessarily the lowest tone. 1. Diskant (treble) in *c′*. 2. Alt (tenor) in *f* (also available in *g*) with 1 key. 3. Nicolo in *f* with 4 keys (lowest tone: *c*). 4. Tenor (basset) in *c* with 4 keys (lowest tone: *G*). 5. Bass in F with 4 keys (lowest tone: *C*). 6. Grossbass in *C* with 5 keys (lowest tone: *GG*; planned).

CURTALS (Dulciane).

After originals in the Berlin Collection. 1. Alt with 2 keys (*f*-fingering; lowest tone: *c*). 2. Tenor with 2 keys (*c*-fingering; lowest tone: *G*). 3. Bass (double curtal) with 2 keys (*F*-fingering; lowest tone: *C*).

RACKETS (Ranketts). (In preparation.)

FLUTE (Traverseflöte).

In *d′* with 1 key (copy of an instrument by Kirst).

OBOES. Barockoboen:

1. Oboe in *c′* with 2 keys (copy of an instrument by J. G. Zencker; pear or boxwood).

2. Oboe d'amore in *a* with 2 keys (copy of instrument by J. Werner).

3. Oboe da caccia in *f* with 2 keys (copy of instrument by Scherer; straight form).

CHALUMEAUX

1 and 2 after originals at Stockholm; 3 is a new reconstruction: 1. Diskant in *c′* with 2 keys (compass: *c′–f″*). 2. Alt in *f* with 2 keys (*f–b′♭*). 3. Tenor in *c* with 2 keys (*c–f′*).

BASSOON. Barockfagott.

1. In C with 5 keys (A♭, F, D, B♭, and E♭, or with 4 keys (i.e. without E♭ key); (copy of an instrument by Denner with 3 keys (F, D, B′♭) in the Berlin Collection.

SORDUNEN

Instruments of modern design going back to the tonal quality of 16th-century double-reed instruments; without keys, with reed cap (Windkapsel), compass: 2 octaves: 1. Sopran in *c′* (lowest tone: *g* or *f*). 2. Alt in *f′* (lowest tone: *c*). 3. Tenor in *c* (lowest tone: F). Bass in *f* (lowest tone: *C*).

N.B. All instruments are available tuned either to *a′*=440 or to *a′*=415.

Ernst Stieber, Geigenbaumeister. Tübingen am Neckar, Pfleghofstrasse 7. (Last c. Dec. 1959.) British Agent: Schott.

VIOLE DA GAMBA. Sopran, Alt, Tenor, Bass.

I. Chor-instrumente. II. Meister-instrumente.

VIOLA D'AMORE. BARYTON.

LUTES

(II.–IV. supplied in three grades; I. in two grades; V. in one grade.)

Single-course: I. 6-string; II. Basslaute, 6 str. and 3 or 6 bass strings.

Double-course: III. Renaissance-Laute, 19 str. (including 4 bass courses); also the same as *theorbierte* lute.

IV. Classical lute: a. 18 str. (incl. 4 bass courses); b. 24 str. (incl. 6 bass courses); also either as *theorbierte*.

V. Reconstruction of Hans Holbein's Lute (1533), 11 str.

GUITARS. Classic models.

FLUTE

Baroque transverse flute, modelled on an original by F. G. A. Kirst of Potsdam (maker to Frederick the Great and Quantz). With ivory rings, extra; of grenadilla, extra. One key.

OBOES

Baroque models after originals by Grenser of Dresden. Two keys. Ivory rings extra.

I. Oboe. II. Oboe d'amore. III. Oboe da caccia.

RECORDERS

With 'baroque' ('English') fingering. (Numbered from catalogue.)

I. 21, 22, Soprano (c''): without double holes; 24, with two double holes; 26, Solo Soprano. Alto (f'): 33, without double holes or key; 34, without double holes, with key; 35, with two double holes; 36, the same, special quality; 37, with double hole G♯ and key; 38, the same, special quality; 39, Solo, with two double holes; 40, Solo, with double hole G♯ and key. Tenor (c'): 52, with double hole D♯ and key; 53, the same, better in pitch; 54, the same, special quality; 59, Solo (like Alto No. 40). Bass (f) (compass over two octaves, as with the preceding): 60; 61, special quality. Double bass (c) (compass over two octaves): 71.

II. Artist Recorders, of *Elsbeere*: all five pitches as above.

Rainer Weber, Bau historischer Musikinstrumente. Bayerbach/ü.Ergoldsbach b. Landshut (formerly Hamburg-Bergedorf). (Last c. Feb. 1960.)

(All instruments to $a'=440$ unless otherwise ordered.)

RECORDERS

I. Renaissance-Blockflöten, cylindrical bore exactly as the originals, compass 2 octaves (the basses a fourteenth); key shape and key-cover as Praetorius, etc. 1. Garkleinflötlein, c''' (with the normal 8 holes); 2. Kleindiskant, f'''; 3. Diskant, c''; 4. Alt, f'; 5. Tenor, c'; 6. Bass, f; 7. Gross-bass, c; 8. Gross-bass, F (with two keys).

SHAWMS (Pommern).

I. Old form (as Praetorius), pearwood, with detachable pirouette (*Mundscheibe*); compass 2 octaves or more. 1. Kleindiskant, *f'*; 2. Diskant, *c'*; 3. Alt, *f*; 4. Gross-alt, *f*, with 3 extra keys for lower notes, *e*, *d*, *c*; 5. Tenor, *c*, with keys for *B*, *A*, *G*; 6. Bass, *F*, with keys for *E*, *D*, *C*. (Gross-bass in preparation.)

II. Later form of *c.* 1650, slenderer, of hardwood, without pirouette. Compass and sizes as above.

CURTALS (Dulciane).

Compass, including the thumb notes, over 2 octaves. Supplied with interchangeable bells for normal and *stiller* tone (the latter especially for early continuo use). 1. Alt, *f*, with the low notes *e*, *d*, *c*; 2. Tenor, *c*, with *B*, *A*, *G*; 3. Tenor, *B♭*, with *A*, *G*, *F*; 4. Bass, *F*, with *E*, *D*, *C*.

CRUMHORNS (Krummhörner).

With reeds of proper cane.

I. Older form, cylindrical, without overblowing; two keys for two extra high notes supplied if desired. 1. Diskant, *c'*; 2. Alt, *f*; 3. Tenor, *c*; 4. Bass, *F*.

II. With the curved part gently conical and brighter tone; overblowing possible at the ninth or tenth, giving a compass of a twelfth. Sizes as above, less the Bass.

RAUSCHPFEIFEN

Widely conical, with cap (*Windkapsel*); very loud, with possible range up to a twelfth.

I. 1. Kleindiskant, *f'*; 2. Diskant, *c'*; 3. Alt, *f*.

RACKET (Rackett).

I. Later type, with conical bore, after an original in the Berlin Collection. 1. Bass, with range *B'♭* to *c'*; reed blown directly (no pirouette); 35 cm. tall including bell.

SORDUNE

After originals at Vienna. Cylindrical bores, reed blown directly. With 5 keys, compass a fourteenth. 1. Bass; 2. Kontrabass (compass *E'* to *d*).

CORNETTS (Zinken).

I. Curved, leather-covered, after the best originals, with sharp-rimmed mouthpieces (exact copies) in horn or ivory; over 2 octaves range. 1. Cornettino, *d'*; 2. Cornetto, *a*; 3. Cornetto, *g*, with *f* key; 4. Cornetto, *c*, with 1 key.

II. Mute cornetts (*stille Zinken*), straight, with round section. 1. In *a*; 2. In *g*, with *f* key.

SERPENT

I. Wood, leather-covered; compass nearly 3 octaves. In *C* or *D* (or, if desired, in *F*).

GEMSHÖRNER

Sounded as recorder, giving darker, fuller tone; of antelope horn. 1. Soprano, *c''* to *d'''*; 2. Alto, *f'* to *c'''*; 3. Tenor, *c'* to *g''*.

OBOE

I. Barock-oboe, after best Denner originals; hard Edelhölzer with ivory mounts and 2 keys.

BASSOON

I. Barock-Choristfagott, 5 keys, compass $B'\flat$ to g'.

Hausmusikverlag Waldemar Woehl. (*22b*) *Waldböckelheim über Bad Kreuznach.* (Last c. Oct. 1959.)

PSALTERIES

(1, 2. Kinderpsalter.) 3. Schülerpsalter, 14 str., diatonic, a–g''. 4. Laienpsalter, 18 str., diat., d then g–b''. 5. Hauspsalter, 23 str., diat., A then d–d'''. 6. Melodiepsalter, 23 str., diat., f–g'''. 7. Grosses Psalterium, 36 str., GG–g''' (or AA–a''').

SCHEITHÖLZER

1. Diskant Scheitholz, 4 str. (d'', a', d', g). 2. Diskant, 5 str. (d'', a', d', g, c). 3. Sopran, as No. 1 but with shorter dimensions. 4. Tenor, 4 str. (d', a, d, G). 5. Tenor, 5 str. (a', d', a, d, G); the additional a' string allows the instrument to be used as alto. 6. Bass (d', a, d, G, D). 7. Bass, as No. 6 but with smaller (tenor) dimensions. 8. Kontrabass, 4 str. (d, A, D, GG).

GREAT BRITAIN

Arnold Dolmetsch Ltd., Beechside, Haslemere, Surrey. (Last c. Oct. 1959.)

VIOLS

Str. length/body length: treble, 14 in./14¼ in.; tenor, 19 in./18¼ in.; bass, 27 in./27 in., 6 or 7 strings. Sycamore bodies, spruce bellies. Other sizes to special order. Bows: pernambuco, fluted.

VIOLIN

REBEC

3 or 4 strings. Pear-shaped.

MINSTREL'S HARP

Metal-strung.

LUTE

16th-century pattern, 15 or 19 strings.

ARCHLUTE OR THEORBO

17th-century model, 27 strings, inlaid with ivory in ebony.

CLASSIC GUITAR

TAMBOURIN

(Oblong string-drum), 12 strings.

RECORDERS

I. Standard Model: 1. Sopranino, f'' (with separate head joint); 2. Descant, c''; 3. Treble, f'; 4. Tenor, c'. These either (a) all wood, (b) with ivory mouth-

piece, (c) with ivory mouthpiece and rings throughout; ivory-bushed thumbhole extra. 5. Bass, *f*, one key; ivory-bushed thumbhole extra.

To special order: Descant, *d''*; Treble, *g'*; Tenor, *d'*. Tone projectors: for descant and treble, moulded; for tenor and bass, hand-made wooden.

Ian Harwood, Pin Farm, South Hinksey, Oxford. (Last c. Sept. 1959.)

LUTE

16th–17th-century construction; 7 double courses and single treble course. String-length 24 in.

In preparation: lute, 15th–early-16th-century design based upon the Arnault of Zwolle MS.

VIHUELA

To order.

B. D. Howells, 34 Gastons Road, Chippenham, Wilts. (Last c. Sept. 1959.)

CORNETTS

Maple, pear, rosewood, box or ebony; leather-covered; modern pitch; with two mouthpieces:

I. Cornetto curvo, modelled on mid-17th-century original; range *a–d'''*.

II. Cornettino curvo, modelled on early 16th-century original; range *c'–d'''*.

Dietrich M. Kessler, Violin Maker and Repairer, 37 Tremlett Grove, London, N.19. (Last c. Dec. 1959.)

VIOLS

With double purfling round back and belly, or also with full purfling ornament in the old English style and with carved heads. Str. length/body length, in inches: pardessus (5 str.) 12¾/13¼; treble (6 str.) 13½/14¼; alto (6 str.) 16/16½; tenor (6 str.) 19¼/19½; division (6 str.) 25/26½; bass (6 or 7 str.) 27/27¾.

With bows by P. W. Bryant.

John Lund, 21 Branksome Crescent, Heaton, Bradford 9, Yorks. (Last c. Nov. 1959.)

FLUTE

Box, blackwood, rosewood, pear or holly; ivory mounted; one key, in silver or brass.

OBOE

Woods as above; plain or with ivory rings; two keys in silver or brass.

CLARINET

Pitch as ordered. Woods as above; ivory rings; 6 brass or silver keys.

BASSOON

Maple or sycamore (other woods if desired); brass or silver bands (ivory if desired); six brass or silver keys.

HORN

Gilding metal, brass or copper, decorated with silver; inventions-horn model with crooks to order.

TRUMPET. As above.

C. W. Monk, St Edmunds, Hindhead, Surrey. (Last c. Jan. 1960.)

CORNETTS, curved, leather-covered; modern pitch.

I. Cornetto curvo, modelled on mid-17th-century original; range *a–d'''*.

II. Cornettino curvo, modelled on early 16th-century original; range *c'–d'''*.

J. George Morley, Harp, Spinet & Harpsichord Maker, 56 Old Brompton Road, London, SW7. (Last c. Oct. 1959.)

CELTIC HARP

30 strings, G to A, with brass semitone blade for each string. Height 39 in. Weight 10 lbs.

David E. Owen, 'Moorings', 135 Wistaston Road, Willaston, Nantwich, Cheshire. (Last c. Oct. 1959.)

LUTES

6- or 7-course.

REBEC

3-string, *g d' a'* or *d' a' e''*.

CORNETTS

Straight, or curved, leather-covered; silver or brass mounted; with or without thumb hole.

Other instruments in preparation.

Schott & Co. Ltd., 48 Great Marlborough Street, London, W1. (Last c. Nov. 1959.)

RECORDERS

Edgar Hunt models: Concert Descant, Treble, Tenor, and Bass. Also cheaper wooden descant, and plastic descant and treble.

UNITED STATES AND CANADA

Friedrich von Huene, 70 Cypress Street, Brookline 46, Massachusetts. (Last c. Nov. 1959.)

FLUTES

I. Baroque models: 1. Hotteterre Model, boxwood with 3 ivory mounts. 2. Quantz Model, copy of a flute played by Quantz, boxwood with 5 ivory mounts. 3. Quantz Model, copy of a flute played by Frederick the Great, ebony with 5 ivory mounts.

II. Renaissance model: 1. Renaissance flute.

OBOE

1. Baroque Oboe, boxwood with 4 ivory mounts.

RECORDERS

I. Baroque models, closely following recorders made by Bressan and other baroque makers. Boxwood, rosewood, tulipwood, grenadilla, satinwood, pear; optional ivory fittings: rings, mouthpiece, thumbhole; 1. Sopranino in *f''*. 2. Soprano in *d''*. 3. Soprano in *c''*. 4. Alto in *g'*. 5. Alto in *f'*. Alto in *e'*. 7. Tenor in *d'* with 2 keys. 8. Tenor in *c'* with 2 keys. 9. Bass in *f* with 2 keys (with or without Bressan strut). 10. Great Bass in *c* with 10 keys.

II. 'Praetorius' models: on request.

III. Renaissance models: on request.

Georg Kelischek, Workshop for Historical Musical Instruments. R.R.I., Box 34, Dundas, Ontario, [*Canada*]. (*Formerly of Bochum, Germany.*) (Last c. Nov. 1959.)

VIOLE DA GAMBA

Available in different models, following old or maker's own design. Str. length: 1. Pardessus in *c'*, 32.5 to 34 cm. 2. Diskant in *d*, 35 to 38 cm. 3. Alt-Tenor in *G*, 53 to 58 cm. 4. Tenor-Bass in *D*, 63 to 70 cm. 5. Kontrabass in *DD*, 90 to 120 cm.

VIOLA D'AMORE

6 or 7 str. with 6 or 7 sympathetic str.; 36 to 39 cm.

BARYTON

6 or 7 str. with 7 to 12 sympathetic str.; 63 to 70 cm.

QUINTON

Various models, tunings, and measurements.

LUTES

Knickhals-Lauten, double strung: 1. Diskant, 11–14 str. 2. Alt, 11–16 str. Tenor-Bass, 11–20 str.

HURDY-GURDY (Radleier).

With single or double playing str. and 2 or 4 bourdon str.; diatonically or chrom. arranged, 1½–2 octaves.

(Also QUINTFIDELN: modern stringed instrument of maker's own design: Sopran-Alt in *c*, 36 cm.; Tenor-Bass in *C*, 63 cm.; Kontrabass, 81 to 120 cm. And BOWED PSALTERY (Streich-Psalterium): new design, with short bow: Sopran, diatonic, *c''–a'''*; or chromatic, *c''–a'''*. Alt. diatonic, *f'–f'''*; or chromatic, *f'–f'''*.)

OTHER STRINGED INSTRUMENTS to order.

Meeme Mälgi, 8–05 119th Street, College Point 56, New York, N.Y. (Last c. Nov. 1959.)

LUTES

11–15 str.; details on request.

PANDORA (Bass lute).

Details on request.

VIOLE DA GAMBA

Details of the several sizes on request.

OTHER STRINGED INSTRUMENTS, e.g. violins, violas, etc., on request.

APPENDIX

PROVISIONAL LIST OF MAKERS OF HISTORICAL KEYBOARD INSTRUMENTS

Abbreviations: C clavichords; H harpsichords; P pianofortes/fortepianos.

GERMANY

Ammer: Eisenberg in Thüringen, Mühlenstrasse 2 (E. Germany). C, H.
Emmo Koch. (See *Index*.) C.
Walter Merzdorf: (17a) Grötzingen bei Karlsruhe, Löwenstrasse 11. C, H.
J. C. Neupert: Bamberg, Knöcklein 9–13. C, H, P.
Richard Rensch: Lauffen a. N., Berggasse 9. C, H.
Martin Sassman: Remscheid-Lennep, Bornerstrasse 61. C, H.
Rudolf Schüler: Hechendorf am Pilsensee-Obb. H.
Rainer Schütze: Heidelberg, Mühltalstrasse 128. C, H.
Martin Skowroneck. (See *Index*.) C, H, P.
Kurt Sperrhake: Passau, Steinweg 14. C, H.
Kurt Wittmayer: Gartenberg/Wolfratshausen-Obb. C, H.

GREAT BRITAIN

William De Blaise: Whelpdale, Maxwell & Co., 47 Conduit Street, London, W1. H.
Arnold Dolmetsch Ltd. (See *Index*.) C, H.
John Feldberg: 92a London Road, Sevenoaks, Kent. C, H.
Robert Goble: Greatstones, Kiln Lane, Headington, Oxford. C, H.
Hugh Gough: 6a Observatory Gardens, London, W8. C, H, P.
Alec Hodsdon: Lavenham, Suffolk. C, H.
Robert Morley & Co.: 4 Belmont Hill, Lewisham, London, SE13. C, H, P.
Neupert-Feldberg. (See Feldberg, *above*.) (British and Commonwealth branch of Neupert, Bamberg, Germany.)
John Paul: Parkway, Waldron/Heathfield, Sussex. C, H.
J. J. K. Rhodes and W. R. Thomas: Easterheughs, Burntisland, Fife. C, H.
Michael Thomas: Hurley Manor, Maidenhead, Berkshire. C, H.

UNITED STATES AND CANADA

John Challis: 85 East Vernor Highway, Detroit 1, Michigan. C, H, P.
William Dowd: 26 Church Street, Cambridge 38, Mass. H.
Howard Everngam: 210 East 96th Street, New York 28, N.Y. H.
Erich Herz: Shaker Village, Harvard, Mass. H.

Frank Hubbard: 185A Lyman Street, Waltham, Mass. H.
Georg Kelischek. (See *Index*.) C, H.
Harry Randall: 188 Manor Avenue, Elkhart, Indiana. H.
Frank Rutkowski: Stony Creek, Conn. H.
Norman Louis Scheck: Romeo, Michigan. C, H.
Wallace J. Zuckermann: 115 Christopher Street, New York 14, N.Y. C, H.

MAKERS OF SMALL ORGANS

(Ps positive/chamber; Pt portative; R regal; in brackets denotes 'to order'.)

GERMANY

Klaus Becker: (24a) Kupfermühle, Post Tremsbüttel ü. Ahrensburg, Holst. (Ps, Pt.)
Werner Bosch: Kassel-Sandershausen. (Ps.)
Förster & Nicolaus: Lich (Oberhessen). (Ps, not exporting at present.)
Gebrüder Oberlinger: Windesheim (Kreis Kreuznach). (Ps, Pt, R.)
Richard Rensch. (See *above*.) (Ps, Pt.)
Alexander Schuke: Potsdam, Gutenbergstrasse 76 (E. Germany). (Ps.)
Georg Stahlhuth: M.B.H. Aachen, Guaitastrasse 17. (Ps, Pt.)
Rainer Weber. (See *Index*.) (Pt.)
Friedrich Weigle: Echterdingen bei Stuttgart. (Ps.)

GREAT BRITAIN

N. P. Mander Ltd.: St Peter's Avenue, Hackney, London, E2. (Ps, Pt.)
Michael Thomas. (See *above*.) (Ps.)

Notes and Queries

AILSA GALPIN (1921–1959)

With the death of Ailsa Galpin (*née* McConnel), wife of the Chairman of the Committee, the Galpin Society lost one of its most energetic workers. Mrs Galpin was largely responsible for the presentation of 'Private Musicke' at the Royal Festival Hall, London, in 1958, and for the Exhibition in the Senate House at Cambridge during the Joint Music Congress of 1959. Her visual flair as a theatrical dress designer (she had worked at Glyndebourne and the Old Vic) contributed greatly to the success of these ventures. By those behind the scenes, however, she will be remembered even more for the good humour and gusto with which she tackled the many anonymous and often thankless chores which lay behind all the activities of the Society during the last ten years; the assembly of glass cases, the polishing of time-stained trumpets, the transport of large and unmanageable instruments from the most inaccessible places. Her friends will not forget her warm heart and her high spirits.

JOAN RIMMER

SIXT RAUWOLF, LUTE MAKER

The well known lute, formerly in the collection of the late Canon Galpin, photographs of which may be seen in the latter's *Old English Instruments*, the catalogue of the Music Loan Exhibition and *Grove's Dictionary*, and now in the writer's collection, is labelled:

SIXTVS RAVWOLF
AVGVSTANVS 1593
manum propia

followed by the maker's monogram consisting of a cross and an R above two interlocking v's.

This lute was exhibited (No. 14 in the catalogue) in the Senate House during the Cambridge Joint Music Congress last year. It was examined by M. André Meyer of Paris who kindly offered to search for biographical details of the maker in the Archives at Augsburg and now sends the following information, here translated from the German:

'Sixt Rau(ch)wolf(f) could have belonged to the family of the Augsburg merchant's son (ironmonger) Leonhard Rauwolf, who after attendance at Italian and French universities graduated in the year 1562 at Valence in the Dauphinée, being appointed in 1565 at Augsburg as small-pox hospital doctor and in 1578 as doctor for internal complaints

and plague-house doctor. Leonhard Rauwolf, who had married in Augsburg a daughter of the Doctor Ambrosius Jung (d. 1559), compiled up to his death in 1585 various medical writings. He reported on his three year stay (1573–1576) in Syria in the diary of his travels. (See *Zeitschrift des Historischen Vereins für Schwaben*, Band 20, p. 44 f.)

'Sixt Rauwolf is to be found in the Augsburg tax books from about 1586 to 1629. He lived in the tax district Sträffinger, later the Barfuesser Thor extra(muros), i.e. "gate of the 'bare-foot' monks" which formed the connection between two suburbs. Possibly he is identical with the lute maker Sixt Rauwolf, who can be found in the Pflegschaftsbuch (Trust book) of the years 1577–1582, pag. 6. His wife was the widow of the lute maker Paul Sturm, *née* Margareta Schlaurin.'

If anyone knows of any other instruments by Rauwolf or any other information about him, I would be most interested to hear.

GUY OLDHAM

HARPSICHORD STRING GAUGES IN SEVENTEENTH-CENTURY GERMANY

Among the manuscripts in the Paris Conservatoire is a German collection of keyboard music of the latter part of the seventeenth century (class-mark: Rés. 819(2)). Several hands appear in the manuscript; the watermark and the contents suggest that it cannot be earlier than 1661 and is more likely to be about 1680 in date. The earlier part is in German keyboard tablature, but from f. 37′ onwards staff notation is used. The manuscript contains transcriptions of songs and chorales, various dances (preludes, sarabandes, allemandes, gigues, etc.) and some exercises for beginners; the period of its compilation probably extended over a number of years. The last pieces are in a clumsy hand and somewhat inaccurately copied.

The last page in tablature (f. 37) contains instructions for the correct stringing of an 'Instrument' (*sc.* harpsichord); since such information is rare, it may be of interest to readers of the JOURNAL. The German symbols for pitches have been given their modern equivalents; otherwise the instructions are reproduced unaltered, the omission of a string gauge for *G* presumably being an oversight:

Wie man ein Instrument beziehen soll

als:

C und *C*♯ mit No. 1. *D* und *D*♯ und *E* mit No. 2. *F*–*G* mit No. 3. *A*–*B*♭ mit No. 4. *B*♮ mit No. 5. *c*–*d* mit No. 6. *e*♭–*f* mit No. 7. *f*♯–*g*♯ mit No. 8. *a*–*b*♮ mit No. 9. *c′*–*f′*♯ mit No. 10. *g′*–*c″* mit No. 11. *c″*♯–*g″*♯ mit No. 12. *a″*–*c‴* mit No. 13.

SIMONE WALLON

MANUFACTURE OF STRINGS IN ENGLAND IN THE EIGHTEENTH CENTURY

It is interesting to find that strings were manufactured in the eighteenth century in England and not only imported. There was a Society for the Encouragement of Arts, Manufactures and Commerce to which many distinguished and noble persons subscribed. William Bailey was the Registrar of this society, which gave rewards and prices in many scientific and artistic fields. The following extract is from his book *The Advancement of Arts, Manufactures, and Commerce* (London 1772), Chap. XVII, pp. 227–228.

It has been intimated several times to the Society, that the making strings for musical instruments would be the means of employing a great number of hands, and of circulating considerable sums of money among our own people: the Society, at first, thought this too trifling an affair to come under their consideration; but, on future enquiry, found that the sums annually paid to foreigners, for this article, very greatly exceeded what they at first apprehended; it was therefore thought advisable to procure a proper person, or perhaps persons, to set on foot a manufacture of catgut (as it is called) in this metropolis: accordingly, by the assistance of an Italian musician, a man and a woman were procured, who had been several years employed in this business, and so well understood it as to carry on, in some remote part of the town, a small manufacture of sheep and lambguts, for musical instruments and other purposes: and, as a proof of their abilities, produced several specimens of Fiddle Strings of their own making, which appeared equal in goodness, to what are called Roman strings; nevertheless, it was required that they should make a trial of their skill in this manufacture, at the Society's office, in the presence of the joint Committees of Chemistry and Manufactures: this they readily complied with; and, according to appointment, the whole operation was performed to the entire satisfaction of the Committee; and, before they left the room, the Strings made in their presence were dried, put into an instrument; and played upon; and, by proper judges, allowed to be equal in tone and goodness to what are imported from Italy: on which, each of the candidates had Six Guineas given them, as a reward for their trouble.

N.B. The Register of the Society has been informed that this manufacture is now carrying on with good success, by other people, in several parts of the town.

SUSI JEANS

RECORDER FINGERINGS

The remarks of Edgar Hunt on the fingering of high notes on the recorder (*GSJ* XI) having recently come to my notice, I should like to add the following observations, which may be of interest to recorder players.

Composers, from J. S. Bach onwards, seem to have a predilection for the top *f*♯‴ of the treble recorder. While this note *can* be reached by slurring upwards from *f*‴ or *e*‴ (it is always approached via *e*‴ in the Fourth Brandenburg Concerto), the fingering thus arrived at, viz. *p* - - - 45 - -, does not allow it to be tongued, or held with an acceptable tone quality. About six years ago I discovered accidentally that a perfectly satisfactory high *f*♯‴ could be obtained with the fingering *p* 1 - 3 4 - 6 - by simultaneously stopping the bore of the recorder at the bottom of the foot joint. (An alternative, slightly flatter, fingering is *p* 1 - - 45 - -, with the end stopped.) I therefore rigged up an open-standing key, operated by the right little finger, to close the end of the recorder when required. Purists, who may object to sullying the recorder by the addition of an extra key, can achieve the same effect by discreet use of the knee, but the operation is hazardous.

With the help of this key, a number of alternative fingerings for high notes become available, some of which allow these notes to be attacked with considerably less ferocity, so that they have a correspondingly more pleasing tone. The following may be mentioned (the notation is that used by Eric Halfpenny, *GSJ* VIII; a hyphen indicates an open hole, 1° the half-closed first fingerhole, *p* the thumbhole 'pinched', *T* thumbhole completely closed, and *K* the end closed by the key):

f‴ *p* 12- 45-- *K* or *p* 123 45-- *K* or *p* 1-3 456- *K*
a‴ *p* -23 -56- *K*
b♭‴ *p* 12- -5-- *K* (unobtainable otherwise)
c♯⁗ *p* 1-3 4-67 *K* (blow hard; awkward)
e⁗ *p* 12- 4-6- *K*
f⁗ *p* 1° 2- 4-6- *K*

The last three are not recommended for musical purposes, though the *f*⁗ speaks with surprisingly little pressure.

The following shakes are facilitated (trilling finger is followed by an asterisk):

d‴–*e*‴ *p* 12- -5-- *K**
f‴–*f*♯‴ *p* 1-3 45*6- *K* or *p* 1-- 45- *K** or *p* 1*23 45-- *K*
(thumbhole may be completely closed for the last)
f♯‴–*g*‴ *p* 1-3 4-6- *K**
g♯‴–*a*‴ *p* -23 -56- *K**

In the course of a systematic investigation of all possible fingerings I came across the following, which are of interest as showing how far current acoustical theory is from accounting for the behaviour of the recorder:

```
-  --3
-  1-3  -567
-  -2-
-  1--
```

On blowing alternately gently and more strongly these all give an alternation between an *f♯″* and a *g♯″* of varying intonations. We thus have here two successive partial tones separated by an interval of only a tone. While they are not useful musically, it is amusing to attempt the performance of a 'breath trill'—and also to test the regularity of one's vibrato.

Another interesting pair of partials is the following: *T* -23 45*--. Played softly this gives a *d″–e♭″* shake, more loudly an *a″–b″* shake. Thus the overblowing intervals are here a fifth and a minor sixth.

J. W. F. JURITZ

SQUARE PIANOS

In every part of the British Isles there are numbers of square pianos, used almost exclusively as articles of furniture even where their owners are pianists—if not also members of the Galpin Society. Many have been painstakingly and authentically restored to their original condition, or as near as makes no matter. Yet even these are at best regarded as historical curiosities, and certainly played only as such. In the Manchester area, however, there are about a dozen square pianos dated from 1790 to 1815 which have been restored to a formula of my own. The owners play them constantly, because their exquisite tone bears no relation to that of the square piano as normally restored. No structural alterations have been made: the instrument remains authentic save in one small detail. The square piano of 1790 to 1815 was a bichord, with two strings to each note. By my method of restoration, they have only one string to each note.

The details of restoration of a square piano, from the state in which it is usually found to playable condition, make a long story and space will not allow me to tell it here, though I hope to do so later. But those who have restored a square piano and find its tone unsatisfying, may turn it into an instrument of surpassing beauty of tone, combining the tonal characteristics of the harpsichord and clavichord with the interpretive possibilities of the pianoforte, simply by removing one string

of each pair. The explanation of this phenomenon, which has been attested by several members of the Society as well as by professional pianists who have visited my home, is twofold: (a) The soundboards of these instruments have to a large extent lost their capacity to sustain the pressure of the original stringing system, but the removal of half the strings halves the load, and enables the soundboard to sustain its burden without losing its crown; (b) the more significant factor: it is a virtual impossibility to tune two strings in exact unison on a small wood-framed instrument, and a complete impossibility to keep them so for more than a few moments of playing life. The result is that one string acts against the other: they swallow up each other's tone, with the result that tone and sostenuto alike suffer to such an extent that these delightful instruments are regarded as interesting curiosities rather than as serious instruments for playing upon.

Single, instead of double, strung, the early square piano can give an entrancing account of Couperin, Rameau, Scarlatti, Bach and any composer up to and including Mozart. Here, the dynamics of the instrument call a halt: it will not cope with Beethoven—but I have heard appropriate works of Debussy, Ravel and Fauré played to some effect upon mine. There is a strong likelihood that as well as the out-of-phase effects produced by the double stringing, and exerted not only directly between string and string through the medium of the soundboard bridge, but also between the resulting air sound waves, there would also be much mutual absorption of vibration between the two strings, resulting in a loss of sostenuto and the cancelling out of some of the pleasing partials, even if they were to be kept in perfect unison one with the other, as they might be in the case of a bichord iron-frame instrument. I have discussed the question with members of the staff of the Manchester College of Science and Technology (the Faculty of Technology of the University of Manchester) and they are so interested that they have agreed, if they cannot find anything adequate on the subject in any textbook, to do original research into these effects and make the result available to all musicians who may be interested.

TERENCE USHER

THE ZILLAH AND RONALD CASTLE COLLECTION

This Collection of Early Music and Instruments, at Wellington, New Zealand, is listed in *Grove*, 5th edn., under 'Collections of Oceania'. It is the largest private museum of its kind in that part of the world. The instrumental section, at present with over a hundred items, comprises

many examples of Early Colonial instruments, such as a Stanesby Senior tenor recorder in excellent playing order; flutes by Potter, etc.; tabor pipe; clarinet by Goulding and D'Almaine; patent violin by T. Howell, Bristol, 1835; three-string bass; square pianofortes by John Broadwood and Francis Clough; zithers of all types; and an *orgue expressif* by Christophe & Etienne. The keyboard section also includes a clavichord, a spinet, a virginal, a single-manual Kirckmann harpsichord (1781), and an organ. Further strings include a viol by Thomas Cole, a viola d'amore, and violins by many makers including Burr (New Zealand), Edward Smith (Wetherby, England), Stubbs (Australia), and W. J. Edwards (New Zealand). The Asiatic section, with many Chinese and other instruments, steadily grows, and there is a section of Primitive instruments. We aim to keep the instruments in playing order and frequently broadcast and lecture, playing early music on authentic instruments. Associated with the instrumental collection is a library of early music and musical bibliography, with over 5,000 compositions, the emphasis being laid on music of before 1800.

RONALD CASTLE

THE LEBLANC SAXOPHONE & CONTRABASS CLARINETS

My description of the new Leblanc (Paris) saxophone in *GSJ* XII ended perforce on a rather noncommittal note since I had not then had an opportunity to play the instrument in question. This state of affairs has now been remedied as far as the alto is concerned, and it can now be reported with confidence that the acoustical qualities of the instrument are in every way outstanding. The tone strikes an unusually good balance between fullness, colour and clarity, and the ease of emission is exceptional. The keywork is also excellently made and incorporates several new constructional ideas. The present saxophone (the name *Le Rationel* has now been dropped) differs slightly from the one described. The German silver body has been replaced by the traditional brass. The low E♭, B♮ and C♯ are no longer obtained by the left little finger only (i.e. without depressing the C key) since the forked E♭ is a pure note, and therefore renders the slide from the C to the E♭ key (with right little finger) unnecessary in any case. The normal obligatory combination of keys from top D to F is restored, but the high F♯ key is retained.

The statement that the instrument works on the open-hole system requires qualification. There is in fact an open-standing key for every note and these can be used exclusively. But the keys for the *traditional* fingerings for E♭, G♯, B♭, and C stand closed. As can be seen in the

photograph in *GSJ* XII, there are two series of tone-holes, one of large holes, the other of small holes. Each plate, when depressed, closes *all the small holes above that point*, and this delightfully simple notion is the source of the apparently complex series of new fingerings. In addition to the top F♯, there are two holes more than there are on the conventional instrument. There are also eight control screws, as against two (or sometimes none at all) on standard saxophones. On the other hand, the octave mechanism—an improved version of the old rocker action—is considerably less complex than usual. Altogether the original impression of essential simplicity, despite the wealth of new fingerings, is confirmed on closer examination.

British composers and arrangers please note that two leading London bass-clarinettists now possess Leblanc contrabass clarinets of the new type described in the same article. In London, this instrument is now a normal part of Bill Lewington's remarkably comprehensive stock (which includes such things as bass trumpets and low-priced bass flutes). Mr Lewington also has a Leblanc E♭ contrabass clarinet (now called the 'contra-alto'), constructed on similar lines to the deeper one in B♭. Notwithstanding the success of the latter, the new contra-alto is invaluable; its compass has been extended to the written low C (sounding *E'*♭, a semitone below the lowest note of the usual double bass), and in a large wind ensemble the E♭ and B♭ contrabasses in unison would give greater evenness since, of course, the relatively weak notes of the 'break' do not occur at the same pitch on both instruments.

JAMES A. MACGILLIVRAY

A NEW SYSTEM OF CLASSIFYING MUSICAL INSTRUMENTS USED IN THE U.S.S.R.

The classificatory system for musical instruments used by Curt Sachs and subsequently by musicologists for the past fifty years has recently been considerably amended by the leading Soviet authority on musical instruments. Mr I. Z. Ahlender (who for twenty-five years was in charge of all construction of musical instruments in the USSR) continues to use Mahillon's laws as the basis of classification;* it is his application of these laws which differs from that of most earlier musicologists.

The two laws of Mahillon are: 1, group name is according to the source of sound; and 2, sub-group name is according to the manner

* *Small Soviet Encyclopedia.* Vol. 6. Moscow, 1960. Pp. 285–289. This system is also used in his book *Musical Instruments of China*, Moscow, 1958 (in Russian and Chinese); and in the forthcoming important *Atlas of the Folk Instruments of the Peoples of the U.S.S.R.*

(method or mechanism) of sounding. The quarrel is not with the laws but with their application: namely, his four groups: *chordophones, aerophones, membranophones,* and *autophones.* For Ahlender considers the first and third groupings correct, the second less so, and the fourth definitely wrong.

Approaching instruments from a physicist's and an engineering viewpoint, Ahlender arrives at six major groups of instruments: strings, air, reed, membranes, lamellar, and self sounding. Thus the 'wind' instruments of Mahillon are broken into 'air', where the source of sound is a vibrating column of air, and 'reed' (usually referred to by western musicologists as 'free-reed') where the source of sound is a vibrating reed. Mahillon's group *autophones* (Hornbostel and Sachs, *idiophones*) is further divided by Ahlender into 'lamellar' (a lamella is a bar, *piece* or part of a whole) and 'self-sounding' (all of which are struck).

Within each of these major groups a number of type changes have been introduced in an effort to make a more logical framework, based on principles of construction. Thus *groups* are based on the *source of sound*; *sub-groups*, on the *manner of producing the sound*; and *types*, on *construction of the instrument*, as follows:

I. STRING INSTRUMENTS

A. *Bowed.* B. *Plucked*: 1, of fixed range (only open strings used, *a* harps; *b* psalteries); 2, with stopped strings (*a* zithers; *b* lutes). C. *Struck* (dulcimers); 1, with fixed scale; 2, with stopped strings. D. *Struck-keyboard.* E. *Plucked keyboard.* F. *Wind-blown* (Aeolian harp).

II. AIR INSTRUMENTS

A. *Blow-hole*: 1, simple tubular flutes without fingerholes (including panpipes); 2, ditto, with fingerholes; 3, duct (fipple) flutes; 4, transverse flutes; 5, globular flutes (ocarinas). B. *'Beating-reed' (split cane)*: 1, single reed; 2, double reed. C. *Mouthpiece* (the lips forming part: trumpets and horns): 1, simple (without or with fingerholes); 2, fingered with mechanical keys or valves; 3, with slide.

III. REED (TONGUE) INSTRUMENTS

A. *Pneumatic* (mouthorgans). B. *Pneumatic, keyed.* C. *Plucked reed* (guimbardes, sansas, musical boxes). D. *Struck reed*: flexation.

IV. MEMBRANE INSTRUMENTS

A. *Struck*: 1, tuned (*a* fixed pitch; *b* changeable pitch); 2, not tuned. B. *Friction*: 1, tuned (*a, b,* as above). (Within these groups there are different types based on construction, as *i*, drum; *ii*, kettle or pot drum; *iii*, frame or hoop drum.)

V. LAMELLAR (BAR) INSTRUMENTS (all are struck)

A. *Without resonator.* B. *With resonator.* C. *Keyboard* (celesta, etc.).

VI. SELF-SOUNDING INSTRUMENTS (all are struck)

A. *Tuned* to give sound of definite frequency (bells, gongs, triangles, cymbals, anklung, etc.). B. *Not tuned* (castanets, clappers, rattles, jingles, sistrum, pellet bells, scrapers, etc.).

Mr Ahlender feels that although the classifications he has used are an improvement on the existing systems, nevertheless the final group still remains something of a 'catch all'. By removing the lamellar instruments from Mahillon's *autophone* group he has corrected a number of errors, but he is still seeking to find additional principles for a scientific sub-division of the instruments called 'self-sounding'.

JEAN L. JENKINS

Book Reviews

THOMAS MORLEY. *The First Book of Consort Lessons . . .* 1599 & 1611. Reconstructed and edited by Sydney Beck. (New York: Peters Edition, for the New York Public Library.) 1959. xx+194 pp. Ill. £13 2*s.* 6*d.* in cloth, £9 7*s.* 6*d.* in paper.

With the publication of this magnificent volume, Mr Sydney Beck has the pleasure and pride of seeing twenty-five years of research brought to a triumphant conclusion. In a Foreword Dr Carleton Sprague Smith, the former Chief of the Music Division of the New York Public Library, recounts in general terms the long story of how the scattered part-books have been tracked down during the last fifty years or so, and tells of how the missing parts were identified or reconstructed. A forty-page Introduction by Mr Beck follows; the remainder of the book consists of the twenty-five numbers of the *Lessons* in full score (staff notation, with incipits for all parts in the original notation) and critical notes on their texts. The illustrations include facsimiles of music and title-pages, as well as a six-colour reproduction of part of the famous mural painted for Sir Henry Unton's widow in about 1596, now in the National Portrait Gallery, London.

My own work on the *Lessons* owes a great deal to the advice and encouragement of Dr Smith and Mr Beck, and there have been many occasions during the last ten years when I have wanted to be able to return to this work. But the pressure of other occupations has been too great. We had once hoped that the present edition might have been a joint one; that is why plates of my own scores of two of Morley's collection were withdrawn from volume IX of *Musica Britannica* ('Jacobean Consort Music'), so that we might see if they could be used as part of the present edition. But there were many practical snags, not the least of them being the width of the Atlantic. Eventually, therefore, my version of these two pieces was issued separately by Stainer & Bell in an eighteen-page publication, which may stand in relation to the present volume as a small dinghy to a fine yacht. A joint edition might in any case have given an unreal picture of the individual contributions made by the two editors; since the great labour of reconstructing all twenty-five pieces in the *Lessons* has been undertaken by Mr Beck, it is only right that the present volume should carry his name and his alone.

Morley's *First Book of Consort Lessons*, a collection of music for instrumental sextet, was first published in London by Morley's assignee, William Barley, in 1599. This first edition contained twenty-three numbers, and it was issued as usual in single part-books, one for each instrument: five quarto books for the pandora, cittern, bass viol, flute and treble viol, and a sixth folio book for the lute. Unique copies of the four part-books for flute, pandora, bass viol and cittern survive in the libraries of Christ Church, the British Museum and the Bodleian; that the lute-book was issued in folio is established not only by the surviving fragments of the lute part of Rosseter's companion publication (as Mr Beck points out on p. 37) but also by John Playford's music catalogue of 1653, reproduced in facsimile as the frontispiece to Humphries and Smith,

Music Publishing in the British Isles (London: 1954). Here 'Morley's Consort' appears in the column headed 'Musick Bookes in folio'. In 1611 an enlarged second edition of the *Lessons* was issued, with two additional numbers. Of the six part-books belonging to this edition, copies of the treble viol book are in the Royal College of Music and the New York Public Library (from Rimbault's collection), and unique copies of those for flute and pandora are in the British Museum and the Henry E. Huntington Library, San Marino, California. No copy of the lute part-book from either edition is known to exist—seemingly an insuperable obstacle to the reconstruction of the *Lessons*—and it is evident that even the other part-books are among the rarest of all Elizabethan and Jacobean music publications. Here is a great challenge to musical scholars; Mr Beck has met it and mastered it.

The broken consort required for the performance of the *Lessons*, with its exquisite blend of differing sonorities, was extremely popular in England at this time. Mr Beck demonstrates this very fully in his Introduction. In 1609 Philip Rosseter published a set of pieces for the same combination of instruments (though it has survived in an even more fragmentary state than Morley's, and reconstruction is impossible). In 1614 it was used by Sir William Leighton for his collection of anthems published in that year; and in the University Library, Cambridge, are the remains of a vast manuscript collection of music for the same consort. Mr Beck began his work of construction by following up a clue of Mr Richard Newton's; certain of the lute parts in this Cambridge collection bear the same titles as those of certain numbers in the Morley collection. In some instances, though not in all, these parts fitted the texture so perfectly that they could without hesitation be identified as the missing parts. From this beginning Mr Beck went on to the manuscript collections of fourteen other libraries, ranging over half the world from Leipzig to California. Bit by bit the pieces of the jigsaw fell into place, and he was able to prepare and study full scores of eight of the *Lessons*, complete in every detail. What appeared to be the lute part of a ninth piece turned up in a song-book in the Rowe Music Library, King's College, Cambridge; but this still left fifteen of the pieces without a lute part, and one lacking both lute and cittern. Nothing daunted, Mr Beck set to work to compose these missing parts, basing his reconstruction on the evidence of the extant music and on his experience of performing the *Lessons*. The results speak for themselves. Musicianly, exciting to play and delightful to hear, the completed collection is a remarkable tribute to his editorial skill. The importance of the collection as a whole is clearly revealed; nowhere else in Europe at this time was there such sensitive and discriminating instrumentation, and English composers may be seen to have made yet another important contribution to the development of chamber music.

The only composer named on the title-page of the *Lessons* is Morley, in fact, but Mr Beck makes a good case for believing that many of them were set by Richard Allison, known hitherto principally as a composer of vocal music. This is not the place to attempt a summary of his arguments on this point, as on many others. Few will wish to dispute them. He suggests, and I am very inclined to agree with him, that the Cambridge part-books may well have come

from Hengrave Hall (rather than, as I once suggested, from the musical workshop of the Cambridge civic musicians). He discusses in detail the instruments Morley had in mind. Morley's 'treble lute' is the ordinary six-course lute of the late sixteenth century, and the bass viol, pandora and cittern need no special comment. By the word 'flute' Morley apparently denoted what we would now term a tenor transverse flute in G, a fifth below the pitch of the normal flute; I once suggested that he meant some kind of recorder, but I am now convinced that this idea was mistaken. The 'treble viol' part was in all probability originally intended for the treble violin, as a good deal of iconographical and other evidence would suggest. I think that Morley chose to publish it as though for treble viol in order not to alienate a substantial section of the musical public to whom his books were addressed. In 1599 the violin was scarcely known or used outside a comparatively small circle of professional musicians. Most amateurs would have played the treble viol, the violin being still (in Anthony Wood's phrase) 'an Instrument belonging to a common Fiddler', and Morley was too good a business man to risk offending amateur musicians. The part itself does not always lie well on the treble viol. Moreover—and to this aspect of the matter I think Mr Beck has paid insufficient attention—since all the other members of the Morley consort belong to different instrumental families, it is unlikely that Morley or Allison would have assigned the conspicuous outer parts to two members of one and the same family, the family of viols. This is dance-music for a broken consort; the more broken, the better. The Unton mural clearly shows a violin, not a treble viol, and the corresponding part-book of the Cambridge manuscripts is labelled 'violin'.

This first edition consists of a thousand numbered copies, but I hope that the demand will be great enough for a second edition fairly soon; a few comments on details may therefore be useful. To begin with, the price. This is breathtakingly high—prohibitive for most English purses, and well beyond the means of University and other students on either side of the Atlantic. The only difference I can discern between the paper-bound and cloth-bound editions is the binding, which uses about sixpenny-worth of gold leaf for the lettering and is made of an ordinary serviceable bookbinders' cloth. To charge £3 15*s.* for such a binding seems to me sheer effrontery. Great though the temptation must have been to produce a *de luxe* edition of what is, after all, rather *de luxe* music, I think it should have been resisted a little more firmly, especially when the edition appears under the auspices of a great Public Library. Music printing can never be cheap, but musicians seldom have much money and they are what Sir John Suckling once called 'the string that makes the hammer strike'. Their requirements are all too often pushed aside by the competing claims of scholars and bibliophiles. The present-day passion for completeness, no matter whether Telemann, Bach, Morley or Reger is the composer concerned, all too often results in the sad situation that the music of these men can be studied only in the austere silence of a library. They wrote it to be performed. My own edition of two of the *Lessons* no doubt has much that is wrong with it, but at least it makes specimens of this outstanding musical style available at a reasonable cost.

One or two minor slips might be considered for correction in a subsequent

edition. For instance, Holborne's *Cittharn Schoole* is not lost (p. 5); copies are in the Royal College of Music and the University Library, Cambridge (this copy was formerly in the library of Dr John Bull). The Gibbons Fantasies of three parts (p. 11) were published in about 1620, not 1610. The four viol-players in the Unton mural (p. 17) are accompanying a little singing boy, not playing instrumental consorts, and one of the players (p. 18) is undoubtedly Sir Henry Unton himself. The most popular form of viol-playing in England at this time, to judge from the surviving sources, was not a trio (p. 23) but a quintet. For 'Fary' (p. 27) read 'Facy'. Cerone's book is called *El Melopeo* (p. 30). The playing position of the bass-viol in the Unton mural representation of the Morley consort is not distorted by artist's licence (p. 17). In the painting the bass-player holds his instrument guitar-wise across his knees, and he bows it in a manner which I can only describe as 'backhanded'. But several other pictures showing this technique are in existence—for instance, Grünewald's famous Isenheim altar-piece—and it seems to have been used when an especially sweet and soft sonority was desired. It almost certainly represents the earliest playing technique ever adopted on the viol, which is in origin a bowed guitar. The dimensions of the flute in the Unton mural (p. 40) suggest that it was noticeably longer than the transverse flute in D, and there are several references in archives of the time to a 'great flute for the consort'; I think that Morley's flute part was therefore intended to sound at its written pitch, despite Praetorius' notions of octave transposition. (Members of the Galpin Society may remember one of the Society's meetings at which the part was played by our Hon. Secretary on a fine early flute of this larger size, to great effect.)

So far as the transcriptions are concerned, I am not sure that it is desirable to incorporate in the text written-out editorial divisions for the melodic instruments, excellent though most of these are. We shall never teach musicians to stand on their own feet and improvise such things, so long as we always give them crutches. In No. 6 I think the editor has been rather too liberal with editorial flats—which should always be rarer than editorial sharps at this period—and the fifth note of the treble viol part in bar 3 is almost undoubtedly misprinted in the original; it should be corrected to A. Between them Barley and Morley have set any editor some pretty puzzles by the slipshod way in which they have created conflicts between the parts, but in my experience tablatures are just as likely to be wrong as are pieces in staff notation, and it is imprudent to place the unquestioning trust in them that some scholars advise. Though Morley's use of time-signatures is not always either consistent or unambiguous, I think that Nos. 10 and 15 were both intended to be played faster than usual, and that Mr Beck's reconstructed lute-part is therefore too elaborate. The 'Michill' of No. 16 (Michills Galliard) is probably an Englishman; I apologize for misleading Mr Beck on this point in one of my more scatter-brained letters to him many years ago, by proposing an Italian red herring. In No. 25 editorial sharps seem to me to have been added far too liberally.

But these are all small points. In conclusion I should like once again to offer my warmest congratulations to all those who have contributed to this publication, and most especially to its editor. It has been lovingly prepared and beauti-

fully printed. Every important music library should have it on the shelves, for the music it contains is of great originality and lustre. But—and I must repeat what I have already said—it is a very great pity that the volume is so expensive. My own copy was presented to me by the editor and I am much indebted to him for his generosity; I could not possibly have afforded to buy the book, despite my very special interest in its contents. T. D.

MAARTEN A. VENTE. *Die Brabanter Orgel.* Amsterdam: H. J. Paris. 1958. 262 pp. Ill.

This new book by Dr M. A. Vente deals with the history of organs in the Netherlands from the middle of the fifteenth to the second half of the seventeenth century. The term *Netherlands* is used in its old meaning and comprises a very large area which includes today's Holland, Belgium, Luxembourg and parts of Northern France. The book is written in German, but English readers will be glad to know that it contains an excellent summary in English. The appearance of the book, paper and print are of the highest order. It contains a full bibliography, a special section on sources and an index of places and persons.

In the preface of his book Dr Vente explains that some specially gifted organ builders, who worked in North Brabant, had developed a type of organ which found its perfection in the organ built by Hendrik Niehoff in 1540 at St Jan in 's-Hertogenbosch. This town is the capital of North Brabant and therefore Dr Vente calls this type of organ 'Die Brabanter Orgel'. He does not limit himself to writing the history of the Brabant school of organ building—which produced some remarkable organ builders like the families Niehoff, Lampeler van Mill, and Hocque—but also discusses all the other schools of organ building in the Netherlands. He supplies innumerable details about the styles of the various schools and explains clearly how they differ from each other. The work of Netherlands organ builders abroad is also fully discussed—they did important work in Germany, Denmark, France and Spain—as well as the work of foreign organ builders in the Netherlands. Biographies of organ builders are given and lists of their works, specifications and technical data are supplied. This enormous amount of material, data and documentation is admirably handled, though the inclusion of a subject index—a possibility for a future edition—would make the material more easily accessible. In his previous book *Bouwstoffen tot de Geschiedenis van het Nederlandse Orgel in de 16e eeuw* (Amsterdam, 1942) Dr Vente has presented us already with a wealth of information, but in *Die Brabanter Orgel* he has summarized his researches and given us a fascinating and clear picture of Gothic and Renaissance organs in the Netherlands and many other countries.

It is known that some of the organ builders of the Netherlands had also worked in England. William Barbour is supposed to have worked here in the fifteenth century (G. Frotscher, *Geschichte des Orgelspiels*, Berlin) but is not referred to by Dr Vente. Other better known organ builders who worked here in the sixteenth century were Michael Mercator, Louis Theewes, and Jasper Blancart from Ghent. It is therefore not surprising that some of the characteristic features of organ building in the Netherlands found their way into English organ building. It is quite likely that the English custom of doubling stops in

the diapason chorus on the Great was introduced from the Netherlands, where a number of stops belonging to the diapason chorus were built with two or more ranks. Such stops stood in the *Blokwerk*—a kind of Hauptwerk built in the fifteenth century—which was an indivisible mixture. Its foundation was a double principal 4 ft. or 8 ft. which was built with two ranks. Sometimes one of the ranks had open pipes while the other one contained stopped pipes which sounded an octave lower. The stops of the *Blokwerk* were not separately available and the *Blokwerk* could be used as an *organo pleno* manual only. It is not known when double stops were first introduced into England. The earliest known detailed specification of an English organ is the one at All Hallows, Barking. In an agreement drawn up by the London organ builder Anthony Duddyngton and the Vicar on July 29, 1519, it was specified that 'the pryncipale to conteyn the length of V foot or more: And to be dowble pryncipalls throweout the seid instrument . . .'. The specification of the organ at Worcester Cathedral, built by Thomas Dallam in 1613–14, proves that the doubling of stops on the 'Great' had by now become also a typical feature of English organ building. The 'Great' of Dallam's organ had two open diapason 8 ft., two principals 4 ft. and two small principals or fifteenths 2 ft., while the stops on the 'Chaire' were built with one rank of pipes only. Similar arrangements on other organs of the early seventeenth century make the reviewer suggest that the terms 'Double' for 'Great' and 'Single' for 'Chaire' could have had something to do with the use of double stops on the former and single stops on the latter.

The information on the tuning of the organs in the Netherlands is also very interesting. Like the early organs mentioned by Arnold Schlick in 1511, they had often F-tuning, which meant that when the CC key was played, it would sound FF. This explains why some early music sounds so unpleasantly high on an instrument with C-tuning. It was probably written for an instrument with F-tuning and should therefore be transposed down a fifth. On the other hand, music noted in a low tessitura could have been written for an instrument with C-tuning and would have to be transposed a fifth upwards.

The chapter on registration is of the greatest practical value to organists. Everyone who wants to play early organ music should read this chapter, which supplies a wealth of new information on the art of early registration.

Some very interesting facts about John Bull emerge from a chapter on organ experts. Bull was apparently frequently consulted in that capacity, and on one such occasion a record was kept of what he advised. This was in December 1617 at St Jan at 's-Hertogenbosch, where he had tested the small organ on the screen. When asked for his advice about building a large organ for the same church, he suggested a keyboard of forty-nine keys, with twenty-nine white and twenty black keys. As against the standard use of the short octave at that time, Dr Bull advocated a complete semitonal octave built upwards from CC, an indication of his preference for equal temperament. He also suggested that the pedal trumpet or bombarde 16 ft. should be built with resonating tubes of 16 ft., and not of 12 ft. length as was proposed. His advice may have been too revolutionary, or perhaps too costly, for it was never carried out.

Many of the pictures in Dr Vente's book are both instructive and beautiful. A photograph of the charming positive organ at Carisbrooke Castle, Isle of Wight, is included, but Dr Vente does not give the name of its builder, nor does he lift the veil of mystery which surrounds this decorative instrument. There is an article in *The Connoisseur* of March 1902 dealing with the history of this organ, which was sold at Christie's for 200 guineas in 1889. When some time later it came into the possession of W. Howard Head, it had a wooden label affixed to the inside of the case with the following inscription: E. HOFFHEIMER. FEC. VIEN. 1592. The date on the outside of the case was 1592. Mr Head for some unknown reason removed the label and altered the date on the outside of the case to 1602. The organ was exhibited at the Music Loan Exhibition of the Worshipful Company of Musicians held at the Fishmonger's Hall, London, in 1904. In a lecture given there by Sir Frederick Bridge the following reference was made to the organ: 'The owner of the organ on which I am going to play this piece says it was built in 1602 in Antwerp. The pipes are made in the shape of a thistle, probably in compliment to the Stuarts in passing into their hands. It was with the Princess Elizabeth, daughter of Charles I, in Carisbrooke Castle at the time of her death. It has been restored by Mr Head, no doubt with very good results.' (*English Music*, Walter Scott Publishing Co. Ltd., London, 1906, p. 178.)

If the organ was really built by Hoffheimer, it would not be Flemish. There is no organ builder of that name mentioned in Dr Vente's book and the label says clearly 'Vien', i.e. Vienna. The name is not Flemish either, but a well-known Austrian or German name. It is of course possible that this unusually handsomely decorated instrument came through the Hapsburg family to the Low Countries. If it is not by Hoffheimer, there are still no apparent reasons why Mr Head or others should have attributed it to a builder from Antwerp. However, perhaps someone will be able to throw some light on this interesting problem.

After reading Dr Vente's book, one realizes what an enormous amount of work would have to be done before early English organs could be discussed in a similar way. Professor W. L. Sumner has done some admirable work on this subject and gathered all the at present available material together in his book *The Organ*, which runs now into its fourth printing. There is however still a large amount of material hidden in the archives of cathedrals, churches and private houses. What is badly needed is a team of researchers who would systematically examine all the relevant documents and also check up at the sources of the facts passed down by Hawkins, Burney, Hopkins and Rimbault and others, and which we now take too much for granted. All this information should be made available at one centre, and research organized from there. We must be grateful to Dr Vente for making this need so clear to us and for showing us in his book that this can be done. His is certainly a major contribution to the history of the organ. S. J.

RENÉ VANNES. *Dictionnaire Universel des Luthiers*. Vol. II (posthumous supplementary volume). Brussels: Les Amis de la Musique. 1959. 198 pp. and prefaces. Ill.

Vannes's Universal Dictionary first appeared in 1932, and was followed in 1951 by a revised second edition still regarded as the most up-to-date and comprehensive reference work dealing with makers of the violin and a number of other European stringed instruments from the sixteenth century to the present day. It covers a very wide field including both professional and amateur makers of instruments and bows; writers on the subject; and others whose names are associated in various ways with the art, craft and commerce of *lutherie*. Such a work, needless to say, can never be complete, nor can it reasonably be expected to be infallible; hence the present supplementary volume. Unfortunately M. Vannes did not live to finish it, but he had collected a great deal of material, and as his intentions regarding its presentation were well known to his publishers these have been able to produce the book as planned, with the addition of a memorial preface by Dr H. Pourtois.

There are sixty-four pages of biographical and corrective notes containing upwards of 2,000 entries, revising and amplifying many of those in the first volume and noting misprints passed over in its list of *errata*, as well as adding particulars of a large number of makers whose names had not previously been included. Over 250 of these names were received from contributors abroad after M. Vannes had been compelled by illness to abandon his work. Like those in Vol. I, the biographical notes are brief, but always interesting and informative wherever there is any interesting information to be given about the men (or, in a few cases, women) and their work. Sometimes a line or two suffices to tell all that is known, but several of the notices run to 300 words or more. After these there comes a list of 151 shop signs, with the names of the makers who used them. Then follows another list, occupying 132 pages, of cities and towns, with the names and dates of makers who were born, worked and died in them, and a point has been made of noting the movements of those who worked in different places, with dated entries for their periods of activity in each place. This record, however, is not complete, since it contains none of the names received after M. Vannes's last illness put an end to his labours. His publishers have printed the list as he left it, at the same time noting that it exhibits some inaccuracies. But it is not only here that uncorrected errors and misprints are to be found, and no exhaustive study is required to reveal the fact that what this Dictionary really needs now is a carefully and extensively revised third edition, embodying in its text all the emendations entered either under the heading of *errata* in Vol. I or scattered liberally through the biographical and corrective notes in the present volume. Furthermore, both volumes demand close examination for other errors and misprints which still stand unremarked. Such a production of the *Dictionnaire Universel des Luthiers* would considerably increase its already great value, set the whole enterprise on a firm basis for future expansion, and offer a fitting memorial tribute to the patience, industry and devotion of its original compiler.

One thing more remains to be noticed: the large supplementary collection of facsimiles of makers' labels, *marques au fer* and branded initials, given at the end of the volume under review. There are nearly 800 of these, bringing the total

for the two volumes to about 4,000 examples. In itself a very considerable achievement, this vast collection of facsimiles impressively illustrates the encyclopaedic scope of René Vannes's great work. K. M. S.

LYNDESAY G. LANGWILL. *An Index of Musical Wind-Instrument Makers.* Published by the Author, 19 Melville Street, Edinburgh 3. 1960. Pp. 139. 35*s.*

In a recent issue of *Die Musik-Forschung* Walter Kolneder, Director of the Städtische Akademie der Tonkunst in Darmstadt, paid a high compliment to British musical scholarship. He wrote: 'About eighty years ago Canon Galpin began to collect musical instruments and also details about their origins. He was the first in the field, and at that time nobody thought that from this beginning a powerful movement would arise which was to give England the leading place in musical instrument research.' The latest publication by a Galpin Society member worthily maintains this standard, though in this context one could perhaps wish that Kolneder had used the wider term 'Great Britain', for the author is a Scot and well represents the high scholarship of the North. Starting with a card index relating to his favourite instrument, the bassoon, Lyndesay Langwill has over nearly twenty years built up an amazing body of information about wind-instrument makers of every kind, and this he now presents to fellow-students in a book. Those who know the author personally will not be surprised, though they may marvel, at the meticulous detail of his work and the degree of condensation he has achieved in setting it down. This is no mere catalogue to be wearily combed through in search of facts but an eminently readable book abundantly cross-referenced and illuminated by notes on the ownership and whereabouts of many important instruments at the time of writing. The need of such a publication has been felt for many years and it is now a pleasure to find it so amply met. Future musicologists will find this book an essential on their library shelves. P. B.

A. ROWLAND-JONES. *Recorder Technique.* London: Oxford University Press. 1959. 151 pp. 10*s.* 6*d.*

Three periods of recorder playing can be distinguished: (1) from medieval times until the beginning of the seventeenth century—the time of the recorder (and broken) consort; (2) from the end of the seventeenth century to the middle of the eighteenth century—the time of the solo baroque recorder; (3) the time from about 1930 onwards. The last period started as a revival of old music on old instruments, and this line is still kept by many recorder players. At the same time the great educational value of the recorder for children and amateurs was discovered and led to the great movement—unprecedented in the history of music—which brought music-making into nearly every school and into hundreds of thousands of homes. As there were not enough trained teachers, the standard of playing was (and is) low, and the recorder—instead of the player—got a bad reputation.

It is, therefore, timely that the O.U.P. has produced a book on *Recorder Technique*, following up similar books on flute, oboe, and clarinet. The author, Anthony Rowland-Jones, has made a very good job of it. In Chapter I he gives

a well-informed view of the history of the recorder, and in Chapter II a compressed but excellent account of the recorder repertoire. I think, however, that he makes a systematical mistake in differentiating between baroque and eighteenth-century music. Also, the old original music for the descant recorder (the old 'fifth flute')—e.g. by van Eyck, Baston, Sammartini, and Handel—should have been mentioned. Chapter III deals with the different kinds of recorders, concentrating on the contemporary set of C and F instruments and omitting 'obsolete' instruments in G, D ('voice flute') and B♭. The differentiation between hand- and machine-made wooden recorders is not convincing: all wooden recorders are nowadays machine-made, but voiced and tuned by hand. I also cannot agree that all instruments larger than descant should have a thumb-rest. I wonder whether and where the author has heard or played recorders *à la* Virdung or *à la* Hamlet that he can state with sureness how they sounded and what their intonation was like. Nor do I think that he does justice to the tone quality of the baroque recorder. More research in this direction is needed before we can say that we 'know'.

Chapters IV to XI deal with playing technique. They give advice about breathing, articulation, fingering, intonation, tone quality and all relevant problems, and are worth really good study. In detail, many readers may disagree with one point or another, e.g. on thumbing, shading, clicking, vibrato, etc., but Mr Rowland-Jones's method is sound and shows great experience. Different methods of approach apart, no essential is overlooked. The book lifts recorder playing from its notorious amateurism to professional level. To the amateur player the impossible will now appear possible, the difficult surmountable.

In Chapter XII, the student is introduced to some problems of ornamentation, and two further chapters give useful hints on practice and performance. A list of contemporary recorder makers and an index complete the immensely useful, and, for its size, very reasonably priced book. W. B.

LINDE HÖFFER VON WINTERFELD AND HARALD KUNZ. *Handbuch der Blockflöten—Literatur.* (Berlin, Wiesbaden: Bote & Bock.) 1959. 139 pp.

The publishers are to be congratulated on the idea of issuing an international catalogue of available recorder music. Recorder music has been published in so many countries by so many firms, with such varied purposes and in such different quality, that a guide through this mass and mess was overdue. The book lists about two thousand publications, in systematical as well as in alphabetical order. The systematical order distinguishes not only between the combinations of instruments but also between old and modern, original and arrangements. New is the category 'Spielmusik'. Under 'Alte Spielmusik' the authors list music in open score from 1500 to 1750. 'Neue Spielmusik' is distinguished from contemporary 'original music', the latter being characterized as works with soloistic intention. According to the preface the authors aimed at completeness in the German literature and at a comprehensive list of the most important publications outside Germany.

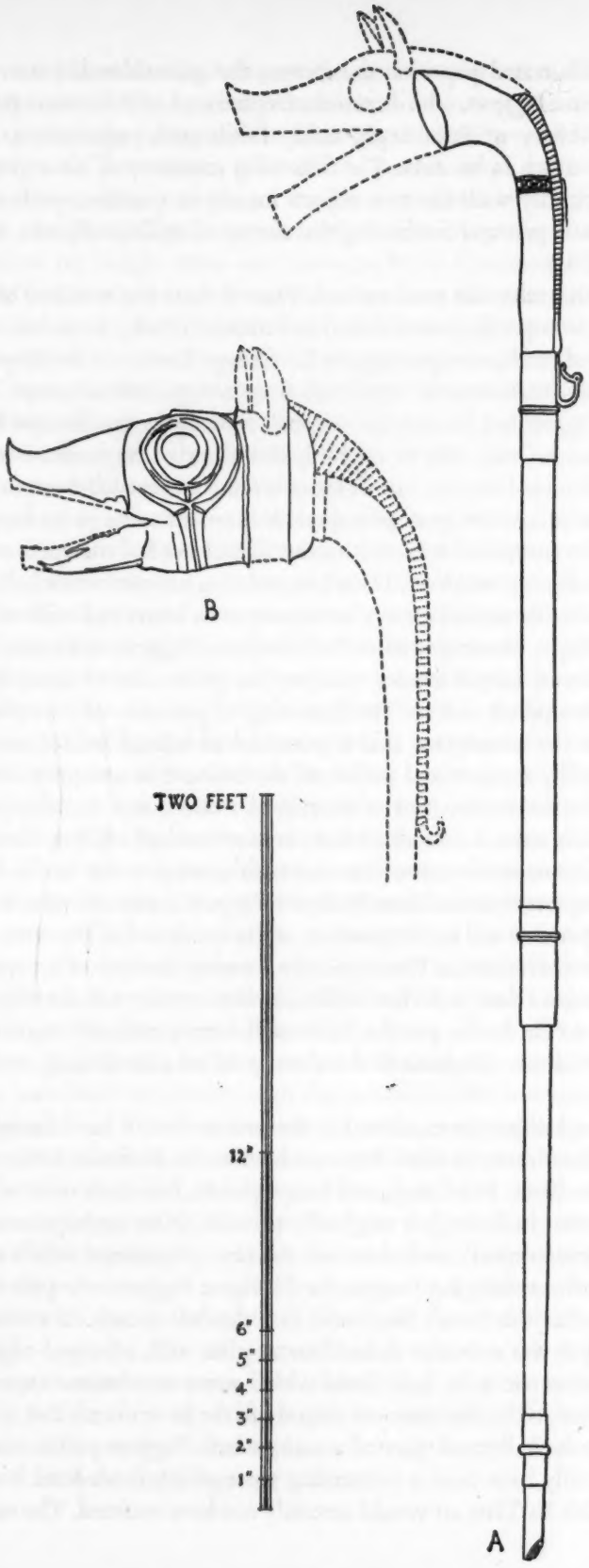
Unfortunately, the good intentions of the publishers have not been material-

ized by the authors. What shall one say about a 'comprehensive' list which omits, for example, all American and Dutch publications? Among these are Loeillet's Sonatas and also one of the most important recorder publications: van Eyck's complete *Fluiten-Lusthof* from the middle of the seventeenth century. In the list of English music, which is otherwise fairly well represented, one of the most sensational recent discoveries, a Descant Recorder Concerto by Giuseppe Sammartini, is missing, and so are important modern works by Cooke, Rubbra, and Tippett. Belgium, France, and Hungary do not seem to exist for the authors. The bibliography, if it deserves this name, leaves out the books by Baines, Manifold, Welch, the Proceedings of the Royal Musical Association, Edgar Hunt's article in *Grove*, etc. Nor are the authors luckier in their systematic layout. Original compositions by Handel, Hotteterre, Purcell, Pepusch, Topham, *The Division Flute*, etc., are down-graded to 'arrangements', while flute studies by Frederick the Great and an arrangement of Warlock's Capriol Suite have been promoted to the original recorder music status. Quite advanced chamber music by Hindemith, Britten, Timothy Moore, Raksin, Graves, Francis Baines, etc., is listed not as Contemporary Original Music but as 'Spielmusik'. Works by Bertali, the Anonymous Master of Breslau, Biber and Schmelzer, which are—together with the *Fluiten-Lusthof*—very rare pieces of the pre-baroque period especially scored for recorders, are also down-graded to 'arrangements' or 'Spielmusik'. A Trio by Quantz for Recorder, Violin and Continuo is listed as being for Recorder, Flute and Continuo. Two different Cantatas by Arne (*The Morning* and *The Wood Nymph*) are mistaken as being one and the same. The authors also should have heard that the Quintet by Loeillet is not for two Treble Recorders but for two Voice flutes (Alto Recorders in D). Vivaldi's Concerto 'Il cardellino' is definitely for flute and not for recorder. And the Cantatas Nos. 142 and 189 by 'Bach' ought to be severely marked as spurious. These are only a few examples of many possible criticisms. I have only two explanations for the shortcomings of the authors: that they have not taken enough time over their job, and that they have obviously never seen some of the works they have listed. Let us hope for a better second edition.

The book is handsomely printed and bound. Its use for the English reader is not diminished by the fact that it is written in German: he can do without the introduction; the catalogue itself is self-explanatory. W. B.

STUART PIGGOTT. 'The *Carnyx* in Early Iron Age Britain', *The Antiquaries Journal*, xxxix, Nos. 1, 2. (The Society of Antiquaries of London, 1959.)

Not only are archaeological relics of European instruments themselves so scarce, but also they are so often, in the excitement of their discovery, subjected to immediate and reckless musical exploitation in terms of familiar modern uses of instruments and of modern habits of the ear and so of no use to anyone. It may be safe to deduce that a helmet, however uncomfortable, was made to be worn on the head when fighting; but not that a bone flute was made to sound 'Three Blind Mice' for musical entertainment. On the other hand, when a great archaeologist subjects a specimen to thorough examination by means of archaeological techniques, we can expect to profit from his conclusions. In this



A. *The Tattershall carnyx restored.*
B. *The Deskford head as a carnyx mouth.*

splendidly illustrated paper on the *carnyx*, the animal-headed trumpet of the Celts, Professor Piggott, who directs the Department of Prehistoric Archaeology at the University of Edinburgh, richly fulfils such expectations and places organology much in his debt. The following summary of his argument so far as it deals directly with the two objects mainly in question, perforce does no justice to his expert and fascinating discussions of stylistic affinities whereby he can assign dates.

Two British relics are re-examined. One of them has vanished since its discovery: the trumpet fragments found at Tattershall Ferry, Lincolnshire, in 1768, first described, with an engraving, by Dr George Pearson in the Royal Society's *Philosophical Transactions* in 1796, and long recognized as carnyx fragments. Professor Piggott has located the original drawing in the Lincoln Public Library, and has so been able to establish that the two fragments—two straight tubes of hammered bronze, one of them bearing a curved and expanding upper section—are in fact two parts of a single instrument some 50 in. long: a length which can be compared with that of the animal-headed trumpets on the well-known Gundestrop cauldron. These last are being sounded while held vertically, and indeed the Tattershall carnyx terminates at its lower end with what appears to be an oblique blowing orifice. Yet, Professor Piggott continues, a carnyx is by definition an animal-headed trumpet (he gives a list of classical references and modern studies) and so 'the Tattershall object can only be placed in this category on the assumption that it possessed an animal-headed mouth which was structurally separate and pulled off the trumpet in antiquity'. Pearson had remarked on the broken end of its curved section, and F. Behn pointed out (1912) that an animal head must have been wrenched off this, leaving behind the broken remains of a mane-like crest such as we now see on the Gundestrop and other representations. Here Professor Piggott draws attention to the tube's decorative patterns and to the presence, at the lower end of the crest, of a duck's head of a well-known La Tène type. By a widely-cast net of comparative evidence he assigns a date in the first half of the first century A.D. for the instrument. To sum up so far, he has put the Tattershall carnyx correctly together so far as the remains allow, emphasized the absence of its animal head, and dated the instrument.

The second object re-examined is the bronze boar's head found in peat at Deskford, Banffshire, in 1816. Now on loan to the National Museum of Antiquities of Scotland, Edinburgh, and long a puzzle, it is made from several pieces of sheet bronze, its lower jaw originally movable (it has undergone some alteration in reconstruction), and there are interior projections which might have been pivots for a swinging tongue, for Professor Piggott now puts forward the suggestion that this boar's head is in fact the bell mouth of another carnyx. Found with it was a circular dished bronze plate with a flanged edge, and with a slightly eccentric 2-in. hole from which some attachment appears to have been torn away. This disc does not directly fit the boar's head. But if we suppose the head to have formed part of a carnyx bell, Piggott points out that there must originally have been a connecting piece which carried the boar's ears—a feature which La Tène art would certainly not have omitted. The missing piece

would also have born the beginning of the crest (see the reconstruction in the drawing, reproduced here by kind permission of the author and the Society of Antiquaries), while the damage to the disc is just that which would be produced by tearing from it the trumpet tube and the crest. Carnyx representations do not show a tube-to-head junction of this kind but a steadily expanding curve joining the two parts; 'but it may be replied that except for the very small representations on Belgic coins our iconography is Continental and largely Gaulish, and that it might be rash to extrapolate from this material to Scotland when it comes to details of construction'. Professor Piggott then deals fully with the Deskford head as a piece of Celtic art, concluding that it is likely 'the product of one of the North British (perhaps Hiberno-British) schools of metal-working, related products of which are known from Yorkshire, Ireland, and eastern Scotland, and that its likely date is within the first century A.D., and probably near the middle of the century'.

Among related objects described in the paper, is a bronze piece found with a South German hoard of Late La Tène metalwork (at Dürnau, and dated the middle of the first century B.C.). It is published, with a photograph, for the first time and identified by the author as the curved section of a carnyx tube, showing traces of the attachment of a lost portion near the wider end.

Among representations of the carnyx the most easterly of those cited in the paper are those on the reliefs at Pergamon (early second century B.C.). Perhaps this range is extended by C. Marcel Dubois, who has illustrated some carvings of the first century A.D. at Sanchi, India, in which a pair of vertically-held bird-headed trumpets are being sounded ('Notes sur les instruments de musique figurés dans l'art plastique de l'Inde ancienne', *Revue des Arts Asiatiques*, XI, Paris, 1937). Their tubes appear, however, to curve towards the player at the lower end. It may be added that an oblique mouth-hole at the lower end of a trumpet is not a unique attribute of the ancient carnyx, for it occurs widely in primitive trumpets made of cane, or of other material with the lower part of cane. Examples are from Assam (Naga), Nigeria (Waja), and Chile (Araucan). The Naga can imitate European bugle calls on theirs. These all have a curved bell, of horn or gourd-neck, but they are not held vertically—an attitude which seems to be associated exclusively with the animal-headed instruments. There is organological scope for a broad enquiry into the origins and significance of the up-turned horn bell associated with many wind instruments and evidently copied in the all-metal Irish and Etruscan trumpets from which the animal-headed forms, in the general view which Professor Piggott shares, were derived. Moreover, as Welch pointed out in *Six Lectures on the Recorder*, some of these horns themselves show what might be construed as a stylized vestige of an animal mouth with open jaws and teeth. Examples here include many shofars and the Welsh hornpipe. The chief obstacle to progress in this enquiry is the uncertain or non-existent pre-medieval chronology of so many types. One keenly awaits further work by archaeologists in identifying and dating musical relics—if indeed it is possible for natural cow horn (as material for anything) to have survived from the Dark Ages or earlier. A. B.

ANDRE LEHR. *De Klokkengieters François en Pieter Hemony*. Asten, Holland: B. Eijsbouts. 1959. 168 pp. Ill.

If your clock plays the Westminster Chimes then you are the owner of what is, strictly speaking, a carillon; the word is a corruption of 'quadrillon', which means a chime of four small bells. Such chimes were familiar enough throughout the Middle Ages; operated by a primitive kind of clockwork, they slowly developed into the elaborate instruments of the sixteenth and seventeenth centuries, capable of playing complex polyphonic music by means of a pinned barrel or a special series of keyboards. Such carillons are the special glory of the Low Countries, though they seem to be of French origin. When Robert Bargrave was in Zwolle in 1653, he heard the carillon installed there by Jan Burgerhuys in 1611; 'In the Steeple,' wrote Bargrave, 'are a sett of chimes which . . . sound severall Tunes of Psalmes: and by the help of a man with hammers in his hands strikes double noats, and play in division, both in tune and time, very much like an Organ: so musically that till I heare something equall it I shall esteeme it Sans Pareille.' Of all carillon-makers the brothers Hemony are the most renowned, and Mr Lehr's new book—published, appropriately enough, by a firm of bell-founders—is a fine commemoration of them. Hemony carillons were once to be found in all the principal cities of the Low Countries, as well as in Mainz, Hamburg, Stockholm and Darmstadt, and a gratifyingly large number of them may still be heard today. The beauty of their tone and the justness of their tuning uphold the Hemonys' claims to have made special advances in these difficult areas of the bell-founder's art, claims which Mr Lehr's book shows are fully justified. Carillons, too, ought not to be neglected by historians of music. In many cities it was part of the organist's job to look after the carillon, to see to the pinning of its barrels with new tunes, and often also to give carillon recitals; elsewhere a special carillonneur was put in charge, a man like the blind Jacob van Eyck, for instance (see 'Four Dutch Recorder Books', and other articles, in the Society's JOURNALS). During the seventeenth century the Cathedral at Antwerp possessed two carillons, one the property of the City and the other belonging to the Cathedral Chapter; thus it is quite possible that the Chapter's carillon was from time to time played by Dr John Bull, and certain of his works may have been composed with the carillon in mind.

I warmly recommend Mr Lehr's book to all those interested in the subject of carillons, as well as to historians of music in the Low Countries. Many famous names appear in its pages—Huygens, Mersenne, Kircher, de la Barre—and there are chapters dealing with the Hemonys' predecessors and successors, their work-periods at Zutphen, Amsterdam and Ghent, and their surviving instruments. The sixteen pages of excellent plates include facsimiles of letters written by the Hemonys, as well as illustrations of the technical processes of founding and tuning. T. D.

JAN LARUE AND JEANETTE B. HOLLAND. 'Stimmer's Women Musicians: a unique series of Woodcuts'. (New York: *Bulletin of the New York Public Library*, January 1960. Vol. 64. No. 1.) 20 pp. 25 cents.

An expanded version of a paper read at last year's Congress in Cambridge, this deals with a series of ten woodcuts printed in Strassburg in about 1575; all ten are reproduced in the article, from a unique collection of the originals acquired by the Library in 1955. The instruments shown are lute, viol, guitar, positive organ, transverse flute, psaltery, cornett, 'clarion', bass shawm, and 'pot, lid and spoon'. Each woodcut is accompanied by a poem; the authorship of these is ascribed, with good reason, to Johann Fischart, in a closely reasoned argument. The writers of the article discuss each instrument in detail, giving translations of the poems. Following the German spelling they call No. 3 a 'quintern'. No. 8 they describe as a 'clarion', though it seems to me to be a clear representation of the 'trompette des ménestrels' or slide trumpet of the late Middle Ages and Renaissance; note that the left hand of the player is holding the mouthpiece against the lips while the right hand grasps the lower end of the instrument's curve—a playing technique always associated with the slide trumpet though never (to my knowledge) with the military trumpet. The crone playing pot-music is a splendid character study. T. D.

Organ Cases in Parish Churches. Notes prepared by the Organs Advisory Committee of the Central Council for the Care of Churches. London: Church Information Office. 1*s.* 6*d.*

This booklet is informative and to the point. It re-formulates principles by reference to functionalism in early organ cases, particularly those of the late Gothic and early Renaissance; and the generous space allotted to illustrations (from drawings by Cecil Clutton) assists this purpose while adding to the interest of the discussion. The 'Werk-principal' arrangement is praised, and the virtues of the west wall position are acknowledged, subject to the condition that the organ 'must be near the choristers if there are any'. An east wall location is also recommended—this might well be considered in the design of a new church. Regarding pipe-patterns, 'the lines of the pipe-tops and of the mouths should be in contrary and never in parallel motion'. An exception to this generally good rule is the new organ in the Italian Church of St Peter, Clerkenwell, where a pattern of curves vertical and horizontal is successful because they enhance those of west window and eastern apse. Another quotation: 'unless the overall shape of the case is pleasing, no amount of decoration will retrieve the situation'. Such sound reasoning should have a wide influence.

A. G.

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